

W. 481
1. 37
63
v. 3

FOR THE PEOPLE
FOR EDVCATION
FOR SCIENCE

LIBRARY
OF
THE AMERICAN MUSEUM
OF
NATURAL HISTORY

RECEIVED
L. B. FRYER
1912

BIRDS

A MONTHLY SERIAL

59 82:06 (73)
CR

ILLUSTRATED BY COLOR PHOTOGRAPHY

DESIGNED TO PROMOTE

KNOWLEDGE OF BIRD-LIFE

VOLUME III.

CHICAGO.

NATURE STUDY PUBLISHING COMPANY.

COPYRIGHT, 1897

BY

NATURE STUDY PUBLISHING CO.
CHICAGO.

19-73509-16.11

INTRODUCTION.

With the January number of *BIRDS*, we enter upon a new year with the satisfaction of having pleased our readers, as well as rendered an actual service to the cause of education, ornithological literature, and art. Among the hundreds of testimonials from competent judges, (many of them scientists), which we have received, we will permit ourselves the use of one only, as exemplifying the excellence which we have sought to attain and the rightful claim which we may make for the future. The writer says: "I find *BIRDS* an everlasting source of pleasure to the children, not less than to myself. I have one of the few almost absolutely *fresh* copies of 'Audubon's Birds,' for which I have refused \$3,000, besides later works, and I will say that the pictures of birds given in your magazine are infinitely more true to life, and more pleasing, every way, than any of those presented in either work. The other day I compared some of your pictures with the birds mounted by myself, notably a Wood-duck and a Wood-cock, and every marking co-incided. The photographs might have been taken from my own specimens, so accurately were they delineated, attesting the truth of your work."

Some of our subscribers, unaware of the prodigality with which nature has scattered birds throughout the world, have asked whether the supply of specimens may not soon be exhausted. Our answer is, that there are many thousands of rare and attractive birds, all of them interesting for study, from which, for years to come, we might select many of the loveliest forms and richest plumage. Of North American birds alone there are more than twelve hundred species.

The success of *BIRDS* is due to its superior color illustrations and the unique treatment of the text. Popular and yet scientific, it is interesting to old and young alike.

The classification and nomenclature followed are those adopted by the American Ornithological Union in 1895.

NATURE STUDY PUBLISHING COMPANY.

THE PIGEONS.

Under the big nursery table
Are Sue, Don, Harold, and Mabel,
All playing, with joy and delight,
That pigeons they are, dressed in white.

Don't you hear their gentle "coo, coo"?
Ah, now they fly out in full view!
And over the meadow they go—
'Tis their own dear nursery, you know—

Where, quick to the tops of the trees
They fly, with lightness and ease ;
There each birdie is glad to be
Perched high upon a big chair-tree.

But to their home in swiftest flight
They haste, ere day has changed to night
Then in they go, with cooing sweet,
And find their home a blest retreat.

And now they tell just where they've been,
And all the wondrous sights they've seen.
Then with their "coo, coo," soft and low,
Each pigeon goes to sleep, I trow.

—EMMA G. SAULSBURY.



From col. Chi. Acad. Sciences.

CROWNED PIGEON.
27 Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

JANUARY, 1898.

NO. I.

THE CROWNED PIGEON.

WE regret that a full monograph of this remarkable bird cannot be given in this number. It is the giant among Pigeons and has some characteristics, on account of its great size, not common to the family. Very little has been written about it, and it would be a real service to ornithology if some one familiar with the subject would communicate his knowledge to the public. These birds pair for life, and the loss or death of a mate is in many cases mourned and grieved over, the survivor frequently refusing to be consoled.

The Pigeon family is an exceedingly interesting one, of great variety of form and color, undergoing constant change by inter-breeding. There are about three hundred known species of Pigeons and Doves, about one third of which number are found in the New World. In North America but twelve

species occur, a family small enough to find room in BIRDS to sit for their pictures. Some of these birds, says Chapman, are arboreal, others are strictly terrestrial. Some seek the forests and others prefer the fields and clearings. Some nest in colonies, others in isolated pairs, but most species are found in flocks of greater or less size after the nesting season. When drinking, they do not raise the head as others do to swallow, but keep the bill immersed until the draught is finished. The young are born naked and are fed by regurgitation.

Living specimens of this the largest species of Pigeons may some day be brought to the United States and made to increase as the Ring-necked English Pheasant has already been domesticated in their own country. It has been suggested that their introduction among us would be a comparatively easy matter.

THE RED-EYED VIREO.

"A bird with red eyes! look, mamma," said Bobby. "How funny!"

"And how beautiful," replied his mamma. "Not plainly dressed, like his cousin, the Warbling Vireo, whose picture you saw in the October number of BIRDS."

"The Yellow-Throated, in the June number," said Bobbie, who has a remarkable memory, "was a lovely bird, too, mamma. Can Mr. Red-Eye sing?"

"No, you can't call his note a song; it is more like a chatter, which he keeps up from morning till night."

"Like some children," said Bobbie, with a sage nod of the head, "who talk all day long."

"Yes," smiled his mamma, "without saying very much, either. But this little bird works while he chatters."

"I reckon he stops at noon time," said Bobbie, "as other birds do."

"No, even then the silence of the woods is broken by the Red-Eyed Vireo's voice. He is such a busy little fellow, he can't find time for a nap."

"Hm!" remarked Bobbie; "the other birds must find him a tiresome fellow, I think."

"Has he any other names, mamma?"

"Yes, he is called the Red-Eyed Greenlet or Red-Eyed Fly-catcher. One gentleman calls him 'The Preacher.' To him the bird seems to say, '*You see it; you know it; do you hear me? do you believe it?*'"

"I'm going to look out for that red-eyed preacher next summer," said Bobby, with a laugh.

"One lady who makes a study of birds thinks he says, '*I know it! would you think it? mus'nt touch it; you'll rue it!*' He makes a pause, as you see, after each sentence."

"Tell me something about their nests?" said Bobbie, deeply interested.

"They are made of bark fibers, cobwebs, bits of paper, and scraps of hornets' nests, in the form of a little pocket. This is suspended from the fork of two or more twigs high up in the tree, making a sort of cradle for the little ones."

"Rock-a-by, baby, on the tree top,
When the wind blows, the cradle will rock."

hummed Bobby. "How jolly!"

"Yes," said mamma; and they take care that it is under some green leaves, which act as an umbrella to keep the sun out of the mother's eyes while she sits on the four pretty white eggs."

"And out of the little ones' red eyes, too," laughed Bobbie. "How cute!"



From col. Chi. Acad. Sciences.

RED-EYED VIREO.
♀ ₁₀ Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

THE RED EYED VIREO.

RED-EYED VIREO, Red-eyed Greenlet, and Red-eyed Flycatcher are the names variously applied to this pretty representative of his family, of which there are about fifty species. The Red-eye is an inhabitant of Central America and Mexico, its northern limit being the lower Rio Grande valley in Texas.

The exquisite little creature is tinted even more delicately than the Waxwing, but with much the same glossy look and elegant air. The ruby-tinted eye, and the conspicuous white line above it, with its border, are good characteristics by which to distinguish it from its relatives.

The Red-eyed Vireo is found alike in the shade trees of lawns, in orchards or woodlands, and is especially fond of sycamore groves along streams. The male is a tireless songster, and even at noon-tide of a sultry summer-day, when all other warblers are silent, his monotonous song will be heard. *He-ha-wha*, or *he, ha, whip*, in rising inflection, and *he, ha, whee*, in falling cadence. He has also a *chip*, a chatter like a miniature of the Oriole's scold, heard only in the season of courtship, and a peculiarly characteristic querulous note which, like others, can not be described with accuracy.

"The Preacher," a name which Wilson Flagg has given this Vireo, exactly reflects the character of the bird and its song. "His style of preaching is not declamation," says the writer. "Though constantly talking, he takes the part of a deliberate orator who explains his subject in a few words and then makes a pause for his hearers to reflect upon it. We might suppose him to be repeating moderately, with a pause between each sentence, 'You see it—You know it—Do you hear me?—Do you believe it?'"

All these strains are delivered with a rising inflection at the close, and with a pause, as if waiting for an answer."

From morning till night this cheery bird sings as he works, from May to September. "His tender and pathetic utterances," says Brewer, "are in striking contrast to the apparent indifference or unconsciousness of the little vocalist who, while thus delighting the ear of the listener, seems to be all the while bent on procuring its daily food, which it pursues with unabated ardor."

As noxious and destructive insects constitute the Vireo's chief food he may properly be classed among the beneficent birds. Seeking for these is his constant occupation, as he hops along a branch, now peering into some crevice of the bark or nook among the foliage, ever uttering his pretty song during the interval between swallowing the last worm and finding the next.

The nest of the Red-eye is built in a horizontal branch of a tree, usually in a small sapling that responds to all the caprices of the wind, thus acting as a cradle for the little ones within. The nest is cup-like in shape, and always dependent from small twigs, around which its upper edges are firmly bound, with a canopy of leaves overhead. It is woven of a variety of materials, fine strips of bark, fibres of vegetables, and webs of spiders and caterpillars. It is said that two nests of the same species are rarely found alike. Some are built of paper fibres, and bits of hornets' nests, and another may be a perfect collection of scraps of all sorts.

The eggs are three or four, white with a few black or umber specks about the larger end.

It was in the nest of the Red-eyed Vireo that Hamilton Gibson found twisted a bit of newspaper, whose single legible sentence read: " * * * have in view the will of God."*

THE EARLY OWL.

An Owl once lived in a hollow tree,
And he was as wise as wise could be.
The branch of learning he didn't know
Could scarce on the tree of knowledge grow,
He knew the tree from branch to root,
And an owl like that can afford to hoot.

And he hooted—until, alas ! one day,
He chanced to hear, in a casual way,
An insignificant little bird
Make use of a term he had never heard.
He was flying to bed in the dawning light
When he heard her singing with all her might,
“ Hurray! hurray ! for the early worm ! ”
“ Dear me,” said the owl, “ what a singular term !
I would look it up if it weren't so late,
I must rise at dusk to investigate.
Early to bed and early to rise
Makes an owl healthy, and stealthy, and wise ! ”

So he slept like an honest owl all day,
And rose in the early twilight gray,
And went to work in the dusky light
To look for the early worm at night.

He searched the country for miles around,
But the early worm was not to be found ;
So he went to bed in the dawning light
And looked for the “ worm ” again next night.
And again and again, and again and again,
He sought and he sought, but all in vain,
Till he must have looked for a year and a day
For the early worm in the twilight gray.

At last in despair he gave up the search,
And was heard to remark as he sat on his perch
By the side of his nest in the hollow tree :
“ The thing is as plain as night to me—
Nothing can shake my conviction firm.
There's no such thing as the early worm.”

—O. HERFORD.



From col. Chi. Acad. Sciences.

FOX SPARROW.
+ 5 Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

THE FOX-COLORED SPARROW.

IN "Wood Notes Wild," S. P. Cheney says this song-loving Sparrow has a sweet voice and a pleasing song, which he has set to music. No Sparrow, he says, sings with a better quality of tone. A distinguished musician himself, no one was better qualified to give a final opinion upon the subject. Others have spoken in praise of it, Burroughs characterizing it as "a strong, richly modulated whistle, the finest Sparrow note I have ever heard." Baird says, "in the spring the male becomes quite musical, and is one of our sweetest and most remarkable singers. His voice is loud, clear, and melodious; his notes full, rich, and varied; and his song is unequalled by any of this family that I have ever heard." Mr. Torrey finds a "Thrush-like" quality in the song of the Fox Sparrow. In his "Birds in the Bush" Mr. Torrey describes an interesting contest as follows:

"One afternoon I stood still while a Fox Sparrow and a Song Sparrow sang alternately on either side of me, both exceptionally good vocalists, and each doing his best. The songs were of about equal length, and as far as theme was concerned were not a little alike; but the Fox Sparrow's tone was both louder and more mellow than the others, while his notes were longer,—more sustained,—and his voice was 'carried' from one pitch to another. On the whole, I had no hesitation about giving him the palm; but I am bound to say that his rival was a worthy competitor."

The Fox-colored Sparrow is also one of the largest and finest of his

tribe, breeding from the Gulf of St. Lawrence and Labrador north into Alaska; in winter it is met with south over the whole of the eastern United States to the Gulf coast. Audubon found it nesting in Labrador from the middle of June to the 5th of July. Its nest has been found in trees and on the ground in the Arctic regions, on the Yukon river in July. According to many observers, the nests are, for the most part, placed on the ground, usually concealed by the drooping branches of evergreens. They are made of grass and moss, lined with fine grass and feathers. Some nests are three or four inches in depth, strong, compact, and handsome. The eggs are three or five, oval in form, of a clayey greenish ground color, dotted with dull reddish brown and chocolate. They vary in coloration.

In the early spring the Fox Sparrow is often seen associated with small parties of Juncos, in damp thickets and roadside shrubbery; later, according to Mr. Bicknell, it takes more to woodsides, foraging on leaf-strewn slopes where there is little or no undergrowth. In the autumn it is found in hedgerows, thickets and weedy grainfields, rarely however, staying far from some thickety cover. It is a great scratcher among dead leaves, and "can make the wood rubbish fly in a way which, in proportion to its size, a barnyard fowl could scarcely excel."

The Sparrows are worthy of close study, many of them possessing habits of great beauty and interest.

BOB WHITE!

I'm a game bird, not a song bird with beautiful feathers, flitting all day from tree to tree, but just a plain-looking little body, dressed in sober colors, like a Quaker.

It wouldn't do for me to wear a red hat, and a green coat, and a yellow vest. Oh, no! that would be very foolish of me, indeed. What a mark I would be for every man and boy who can fire a gun or throw a stone, as I run along the ground in clearings and cultivated fields. That's the reason I wear so plain a coat. At the first glance you would take me for a bunch of dried grass or a bit of earth, but at the first movement, off I go, running for dear life to some thickly wooded cover, where I hide till danger is passed.

Cute! Yes, I think so. You would have to be sharp, too, if you were a game-bird. Through the summer we don't have much trouble, but just as soon as cold weather sets in, and our broods have grown to an eatable size, "pop" go the guns, and "whirr" go our wings as we fly through the air. It is only at such times we take wing, sometimes seeking refuge in a tree from our enemies. I'm sorry we are such nice birds—to eat—for really

we like to stay around farm-houses and barn-yards, eating with the chickens and other fowl. We are easily tamed, and the farmers often thank us for the injurious insects we eat, and the seeds of weeds.

How do we know they thank us? Why, we must know that, when they scatter seed for us on the snow. Kind deeds speak louder than words, for in the winter we suffer a great deal. Sometimes when it is very cold we burrow down under the snow, in snow-houses, as it were, to keep warm. That is risky, though; for when it rains and then freezes over, we are in a trap. A great many Quail die in this way during a hard winter.

Is Quail another name for Bob White? Yes, but people like Bob White better. Did you ever hear me whistle? If not, come out in the country in the spring, and hear me call to my mate. I sit on a fence rail, and, to let her know where I am, I whistle, *Bob White! Bob White!* and if she pretends to be bashful, and doesn't answer me at once, I whistle again, *Bob, Bob White! Poor Bob White!* She takes pity on me then, and comes at my call.



From col. F. M. Woodruff.

BOB-WHITE.
 $\frac{3}{4}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

BOB WHITE.

BOB WHITE is a plump, fine-looking fellow, known in the New England and Middle States as the Quail and in the Southern States as the Partridge. It is said, however, that these names belong to other and quite different birds, and at the suggestion of Prof. Baird, Bob White, which is its call note, has become its accepted and present name. In the language of Mr. N. S. Goss these birds appear to thrive best in the presence of man, and were they protected during our cold winters, would soon become quite tame. They often nest near our dwellings. "In the spring of 1867," says Mr. Goss, "I was shown on Owl Creek, Woodson County, Kansas, a nest containing nineteen eggs. It was placed in the dooryard, and not over twenty-five yards from the house; several dogs were running about the yard, and the house cat was purring near the doorway. Fearing the eggs would be destroyed, I suggested the building of a high, tight fence round the nest. 'Oh,' said the farmer, 'that is not necessary; our cats and dogs will not harm them, for they know them well, as they have for a long time run about with the chickens, and feed with them from food thrown from the doorstep.' I am confident that if man were as friendly to the birds as they are to man, they would soon become thoroughly domesticated. Trapped and hunted as they are with dog and gun it is not strange that as a whole they remain timid and mistrustful, and were they not naturally birds of civilization would rapidly disappear with the settlement of the country. As it is, they seem to realize that man

is only at times their enemy, and that his cultivated fields afford them a safe refuge from many other enemies, and insure a more certain and bountiful supply of food than found elsewhere."

Quails destroy injurious insects and seeds of weeds, upon which they largely feed. When startled they rise with a loud whirring sound, their flight being very swift, low, and direct, a rather laborious effort. They move about in small coveys or family groups, pairing during the nesting season, and share alike in the duties of protecting and rearing the young.

The nest is placed on the ground, in a depression, usually in the grass upon the prairies, sometimes in a thicket, under a low bush. It is usually arched over with grass, with entrance on the side.

From fifteen to twenty pure white eggs are usually laid.

S. P. Cheney pleasantly says: "Familiar as I have been with almost all parts of Vermont for more than thirty years, I have seen only one Quail in the state, and he was evidently a 'tramp.' I heard him just at night, the first day of July, 1884. Did not get sight of him till the next morning, when he came out into the sun, stood on the top rail of a fence, warmed himself, and whistled his spirited, forceful tune, his solid little body swelling and throbbing at every note, especially when he rose to the tonic. I was prepared for him, and made an exact copy of what he gave: *Bob, Bob, White! Bob White! Bob, Bob, White!* After the performance he stood, evidently listening for a reply; none came, and without another note he disappeared, to be seen no more."

BIRDS IN THE SCHOOLS.

THE movement to protect the birds of America and prevent them from being transformed into millinery in such prodigious numbers, is having a marked revival in many parts of the country, especially in the state of New York. In New York City there was recently held a large public meeting, under the auspices of the Audubon Society and the American Museum of Natural History, to protest against the wholesale and indiscriminate destruction of native birds for personal adornment. State Superintendent of Schools Skinner, of that state has established a "bird day" in the public schools in connection with Arbor Day, in which the pupils will be taught the great value of birds to mankind. Mr. Skinner also has in preparation a manual upon the subject, 100,000 copies of which he will have distributed among the New York state schools.

Public ignorance regarding the value of birds in the economy of nature and especially to human life is so great as to be almost incomprehensible. A number of estimates recently made by Morris K. Jesup, President of the American Museum of Natural History, show how important it is that a stronger safe-guard, in the shape of public sentiment, should be thrown about our feathered benefactors. In a late interview upon this subject, Mr. Jesup said :

"Among the birds most worn this winter are the Herons, which are killed for their aigrettes ; the Terns, or Sea Swallows and Gulls ; in short mostly marsh and maritime birds." It is known that the killing of a great number of these shore birds has been followed by an increase in human mortality among the inhabitants of the coast, the destroyed birds having formerly assisted in keeping the beaches and bayous free from decaying animal matter. New Orleans had a plague of

bugs about the middle of September, just when the yellow fever began, and, strange as it may seem, the bugs proved far more troublesome than the disease, and certainly the annoyance was more immediate. The people called it a mystery, but the scientists said it was merely the result of man's improvidence in destroying the birds. The destruction has been going on in Louisiana, particularly on the Gulf coast, for years, and has been carried on by professional hunters, who kill the birds solely for millinery purposes. Nature revenged herself on New Orleans, as she will on every place where birds are destroyed for fashionable purposes.

Would it not be a good thing to increase the intelligence of the present and rising generation respecting the value of birds by introducing into the schools of every state in the Union the idea which has been adopted by State Superintendent Skinner? And we respectfully suggest that the use of this magazine by teachers, through the wise co-operation of school boards, everywhere, as a text book, would quickly supply the knowledge of bird life and utility so sadly needed by the community. We present some of the innocent creatures each month in accurate outline and color, and the dullest pupil cannot fail to be impressed by their beauty and the necessity for their protection. "Our schools, public and private, can hardly be criticised as instructors in the common branches of learning, but they could also teach the rising generation the equally important truths relating to the material world with which we are encircled." In Colorado and in some other states Boards of Education have supplied their teachers with *BIRDS* in sufficient quantities to enable their pupils to study the subjects in the most profitable manner.

—C. C. MARBLE.

THE PASSENGER PIGEON.

IF the reader is interested in numbers, he will appreciate the statement written about 1808 by Wilson, who estimated that a flock of Wild Pigeons observed by him near Frankfort, Kentucky, contained at least 2,230,272,000 individuals. If he is also interested in the aspect presented by these birds in flight, cloud-like in form and apparently boundless in extent, he will read the full and graphic descriptions given by Audubon. In 1863, when the writer was a boy, he remembers seeing the birds brought to town in barrels and sold at a price which did not justify transportation to market. What appeared to be a cloud, dark and lowering, was not infrequently seen approaching, soon to shut out the light of the sun, until the birds which composed it, on the way to or from their feeding or roosting places, had passed on. Now hear what Major Bendire, as late as 1892, says: "It looks now as if their total extermination might be accomplished within the present century. The only thing which retards their complete extinction is that it no longer pays to net these birds, they being too scarce for this now, at least in the more settled portions of the country, and also, perhaps, that from constant and unremitting persecution on their breeding grounds, they have changed their habits somewhat, the majority no longer breeding in colonies, but scattering over the country and breeding in isolated pairs."

The natural home of the Wild Pigeon is within the wooded lands, and they are seldom met with upon the broad

prairies. Audubon observed that it was almost entirely influenced in its migrations by the abundance of its food, that temperature had little to do with it, as they not infrequently moved northward in large columns as early as the 7th of March, with a temperature twenty degrees below the freezing point.

"The Wild Pigeons are capable of propelling themselves in long continued flights and are known to move with an almost incredible rapidity, passing over a great extent of country in a very short time." Pigeons have been captured in the state of New York with their crops still filled with the undigested grains of rice that must have been taken in the distant fields of Georgia or South Carolina, apparently proving that they must have passed over the intervening space within a very few hours. Audubon estimated the rapidity of their flight as at least a mile a minute.

The Wild Pigeon is remarkable for its ease and grace, whether on the ground or the limbs of trees. Though living, moving, and feeding together in large companies, they mate in pairs. Several broods are reared in a season. Nesting beginning very early in the spring. The nests are placed on trees, being a slight platform structure of twigs, without any material for lining whatever. Two white eggs are laid.

Mr. Goss says (1891) that the Passenger Pigeon is still to be found in numbers within the Indian Territory and portions of the southern states, and in Kansas a few breed occasionally in the Neosho Valley.

THE PASSENGER PIGEON.

Some people call us the Wild Pigeon and the Gypsy among birds. We do wander long distances in search of food, and when we have eaten all the beech nuts in one part of the country, take wing, and away we go like a great army to another place.

And such an army! We form in a column eight or ten miles long, thousands and thousands of us, our approach sounding like a gale among the rigging of a vessel. Not always in a straight course do we go, but in a winding way looking for all the world, against the sky, like a vast river. Then our leaders give the word, our captains, you know, and we form in a straight line, sweeping along as you have seen regiments of soldiers marching on parade. We are just as fond of forming new figures as they are, and our captains, by their actions, give their orders much in the same way.

"Down, Up! Right, Left!" and away we go forming our evolutions in the air.

But you should see us when Mr. Hawk attacks our flock. Then, like a torrent, and with a noise like thunder, we rush into one compact mass, each pressing upon the other toward the center. Swiftly we descend almost to the earth, then up again, forming as

we do a straight column, twisting, turning, looking, when far up in the air, like a great serpent. At other times we fly straight ahead, very swiftly, going at the rate of a mile a minute. I don't believe any of you little folks have ever traveled as fast as that behind a locomotive.

Then our roosting places! Ah, you ought to see us there! There was one in Kentucky, I remember, in a dense forest, where the trees were very large, a forest forty miles long and three wide, larger than many cities. The Pigeons began to collect after sunset, thousands upon thousands, flock after flock continuing to arrive even after midnight. There were not trees enough to go around, and so many of us perched upon one limb that the largest branches broke, killing hundreds of Pigeons in their fall. The noise we made could be heard at the distance of three miles. People who like Pigeon pie came with long poles and guns, and when morning broke, and the Pigeons that could fly had disappeared, there were heaps and heaps of little fellows lying dead upon the ground.

We occupied that roost about two weeks. When we left it for good, the forest looked like it had been swept by a tornado.



From col. Ruthven Deane.

PASSENGER PIGEON.
 $\frac{1}{2}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

THE SHORT-EARED OWL.

"I think," said Bobbie, looking over the present number of BIRDS, "that the Owl, instead of the Red-eyed Vireo, ought to be called 'The Preacher.'"

"Why?" said his mamma, always pleased at her boy's fancy.

"Because the Owl looks so wise—and—solemn!" said Bobby.

Mamma laughed.

"He does look solemn," she agreed, "but about his wisdom I am not so certain. Turn to the text and let us see what he does say about himself."

"*Hoo, hoo, hoo, hoo!*"

"That doesn't sound very wise," said Bobbie, reading aloud, "though Mr. Shouter's preaching sounds like that to me sometimes."

"Does it?" replied mamma, suppressing a smile, "well go on and see what else he says."

"I'm not a Screech Owl, nor a Barn Owl, nor a Great Horned Owl, nor a Long-eared Owl, though I am related to each of them. Mr. Screech Owl thinks he is a singer, and so does Mr. Horned Owl. Between you and me, I think both their songs most doleful ditties. One gentleman says Mr. Horned Owl hoots in B flat, another says in F sharp, and another in A flat. I must confess it all sounds very flat to me. "I don't pretend to sing at all.

Sometimes I feel like saying something, just to hear the sound of my own voice, and then I shout '*Hoo, hoo, hoo, hoo!*' as loud as I can. If there are little Owls in the nest, and anything approaches them, I give a shrill, hollow cry, at the same time snapping my bill spitefully.

"I am sometimes called the Marsh Owl, because I frequent the grassy Marshes instead of the woods. I don't confine myself to prowling around only in the night time, like some Owls I know, but you will see me about also on dark days, and sometimes even when the sun is shining.

"My eyes, you see, are round and yellow just like a cat's, shining in the dark like his. Indeed there is a good deal of the cat in my nature. When stealing on my prey I go about it just as stealthily as he does. Like him I catch mice too, but I also like beetles, gophers, and all sorts of little water birds.

"I have only two eyes, but I have two sets of eyelids. One I draw over my eyes in the day time, a thin sort of curtain to keep out the light, and the other a heavy curtain which I pull down when I go to sleep. I'm going to sleep now. Good night! or, rather, good morning!"

THE SHORT-EARED OWL.

MARSH OWL, Meadow Owl, and Prairie Owl, are some of the names of this species of an interesting family, which is found throughout North America at large, though in greater numbers in the Arctic regions during the nesting season than in the United States. It is believed that no land bird has so extensive a range as this species, occurring, as it does, throughout all the grand divisions of the earth's surface, except Australia. In America it is found everywhere in favorable localities, from Alaska and Greenland to Cape Horn. Truly a cosmopolitan bird, observed by the inhabitants of nearly all countries.

The Short-eared Owl is seen in the marshes, the thickets of bottom lands, and Davie says it seems to be particularly common in the tall weeds and grass of fields and meadows. In the west it is found on the extensive prairies, along sloughs, hiding in the day time among the sage bushes and tall grass. It is a night wanderer, but often hunts its food on dark days, and field mice, moles, shrews, and other small rodents are captured by it while on noiseless wing, or while standing motionless watching for its prey.

The nest of the Short-eared Owl is made on the ground in the matted grass of marsh land; sometimes in a depression at the foot of a bush, beside a log, or in a burrow made by a rabbit or a muskrat. A few sticks, soft

grasses, and some of its own feathers usually comprise the nest proper, though the eggs are not infrequently laid on the bare ground. These are from four to seven, white and oval. In Ohio they are laid in April, sometimes as early as the latter part of March, or as late as the middle of May, within which dates it doubtless may be found breeding throughout the United States.

Mr. Nelson says that this is the most abundant species of the Owl family. They are common everywhere in Illinois during the winter, remaining concealed in a bunch of grass or weeds until almost two o'clock p. m., when they commence flying low over the ground in search of food. When approached, while standing on the ground, they crouch and try to escape observation. They are harmless and are easily tamed, and as a rule, are silent. Mr. Nelson heard one of the birds, in Alaska, utter rapidly a loud cry which sounded like the syllables *Hoo, hoo, hoo, hoo*, in a higher key than the note of the Horned Owl, and in a much less sonorous tone. When alarmed for their young, they have been heard to utter a shrill hollow cry, and at the same time make quite a noise by spitefully snapping their bills.

We fancy the Owl family alone will enable BIRDS to furnish a collection of pictures—perhaps forty in number—that will fascinate the bird lover, and make him eager to possess other groups for study, wonder, and delight.



From col. O. C. Pagin.

SHORT-EARED OWL.
¾ Life size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

THE ROSE COCKATOO.

I look like a foreigner, don't I? You may search through the forests of America and you won't find a bird that looks like me.

My family live in New Guinea; we speak English when we get among English people, Spanish when we get among Spanish people, and French when we get among French people.

If you don't believe it, just say "*Parlez-vous Francais, Monsieur?*" and see how quickly I'll open my pretty mouth and answer "*Oui.*"

If you don't understand that, ask your teacher what it means. I once lived in a French family, you see.

You don't think my mouth is pretty, did you say? Well, that is according to taste. I think it is. Of course, my bill turns in like a hook, as Miss Poll Parrot's does, and my tongue is thick like hers, but I fancy I talk much plainer than she does. Anyway I talk louder. Why, if you should happen to hear, without

seeing me, you would think it was a man's strong voice talking to a deaf person.

And then my laugh! You should hear me laugh when I'm angry. Whew! Have you ever heard a hyena in the Zoo? Well, it sounds something like that.

I am a large, handsome bird. My eyes also are large, and so are my feet. That is the reason I not only talk, but walk Spanish, I suppose.

But, my cap! That is what distinguishes me. You never saw a common Parrot with a crest like that. When I am angry the feathers stand straight up, opening and closing just like a lady's fan.

The next time your mamma or papa takes you to the Zoo, turn to the cage of foreign birds and see if one of our family is not there. Maybe he will talk to you and maybe he'll not. He would if you could get into his cage and stroke his head. I am sure he would laugh if you tell him *Mr. Rose Cockatoo* sends his love.

THE ROSE COCKATOO.

THE Rose Cockatoo, as may be seen, is a remarkably handsome bird. The species is gregarious, and they are very numerous in South Australia, where they frequent woods and feed on seeds, fruits, and larvae of insects. Their note is harsh and unmusical. The young ones tame readily and some species show remarkable intelligence. They associate in flocks of from one hundred to one thousand and do great damage to newly planted grain, for which reason they are mercilessly destroyed by farmers. Two eggs only, of a pure white color, are laid in the holes of decayed trees or in the fissures of rocks, according to the nature of the locality in which they live.

This is a rather large bird, equalling a common fowl in dimensions, and assuming a much larger form when it ruffles up its feathers while under the influence of anger. Many of these birds are fine talkers, and their voice is peculiarly full and loud.

An authentic anecdote is told of a Cockatoo which was quite celebrated for its powers of conversation; but as he was moulting at the time, his voice was temporarily silenced, and he sat in a very disconsolate manner on his perch, looking as if he had fallen into a puddle and not had time to arrange his plumage. All the breast and fore-parts of the body were quite bare of feathers and even the beautiful crest had a sodden and woe-begone look. By dint, however, of talking to the bird and rubbing his head, he was induced to

say a few words, which were given in a voice as full and rounded as that of a strong voiced man accustomed to talk to deaf people. Presently the spectators were startled with a deafening laugh, not unlike that of the hyena, but even louder and more weird-like. On turning around, they saw the Cockatoo suddenly transformed into a totally different bird, his whole frame literally blazing with excitement, his crest flung forward to the fullest extent, and repeatedly spread and closed like the fan of an angry Spanish lady, every feather standing on end and his eyes sparkling with fury while he volleyed forth the sounds which had so startled them. The cause of this excitement was the presence of two children who had come to look at the bird, and whom he recognized as having formerly excited his ire. He always objected to children, and being naturally irritable from the effect of moulting his temper became uncontrollable.

The Cockatoo is not gifted with the wonderful imitating powers of the true Parrot, and on account of its deafening cries is not an agreeable inhabitant of the house. It is in a state of nature that the birds are most interesting. They are not shy or wary, are very vociferous, and, like the common Parrots, rise up in bodies toward sunset and fly two-and-two to their resting places. It is a superb sight to see thousands of these beautiful creatures flying overhead, low enough to permit a full view of their feathered mantles.



From col. Chi. Acad. Sciences.

COCKATOO.
 $\frac{1}{2}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

PLEAS FOR THE SPEECHLESS.

Sweet mercy is nobility's true badge.—SHAKESPEARE.

IF all the birds should die, not a human being could live on earth, for the insects on which the birds live would increase so enormously as to destroy all vegetation.—MICHELET.

Prof. E. E. Fish estimates that birds save, for agricultural purposes alone, annually, one hundred million dollars in the United States, and we are told that insect life in many places has increased so as to make human life almost unendurable.

The bravest are ever the most humane, the most gentle, the most kind; and if any one would be truly brave, let him learn to be gentle and tender to everyone and everything about him.—REV. ARTHUR SEWELL.

"Every first thing continues forever with a child; the first color, the first music, the first flowers paint the foreground of life. The first inner or outer object of love, injustice, or such like, throws a shadow immeasurably far along his after years."—JEAN PAUL RICHTER.

We have long ago found that the great remedy for all these wrongs lies, not in law and prosecuting officers, but in the public and private schools; that a thousand cases of cruelty can be prevented by kind words and humane education, for every one that can be prevented by prosecution; and that if we are ever going to accomplish anything of permanent value for the protection of those whom our societies are organized to protect, it must be through the kind assistance of the teachers in our public and private schools.

We found another important fact, that when children were taught to be kind to animals, to spare in spring-time the mother-bird with its nest full of young, to pat the horses, and play with the dogs, and speak kindly to all harmless living creatures, they became more kind, not only to animals, but also to each other.—GEO. T. ANGELL.

I am in thorough accord with the proposition to have the birds protected, and my words cannot be clothed in too strong language. We are a nation of vandals. Birds make the choir of the heavens and should be protected.—CARDINAL GIBBONS.

THE MOUNTAIN PARTRIDGE.

THIS, one of the most beautiful of the Partridges, is much larger and handsomer than Bob White, though perhaps not so interesting or attractive as a game bird. The pretty plumes are noticeable in the chick just from the egg, in the form of a little tuft of down, and their growth is gradual until the perfect plumage of the adult is obtained.

The Mountain Partridge is found breeding along the Pacific coast region from California north into Washington. According to the observer Emerson, it is found nesting in the higher mountain ranges, not below four thousand feet. In some portions of Oregon it is very abundant, and would be sought for by the sportsman with great assiduity were the regions that it inhabits more accessible. As it is, it is not only hard to find but very

difficult to secure when once flushed, hiding easily from the dogs, who become discouraged by repeated unsuccessful efforts to find it.

The Mountain Partridge deposits its eggs on the ground, on a bed of dead leaves, under a bush or tuft of grass or weeds. Its habits are exceedingly like those of the Bob White. From six to twelve eggs are laid of a cream color, with a reddish tint. They have been described as mineatures of those of the Ruffed Grouse, only distinguishable by their smaller size.

This Partridge will usually run before the dog, is flushed only with much trouble, and often takes to the trees after being started. California is comparatively destitute of wood except on inaccessible mountain sites and canons, localities preferred by these birds. It is not known to descend to the valleys.

BOB WHITE.

"I own the country here about," says Bob White ;
"At early morn I gayly shout, I'm Bob White !
From stubble field and stake-rail fence
You hear me call, without offense,
I'm Bob White ! Bob White !
Sometimes I think I'll ne'er more say, Bob White ;
It often gives me quite away, does Bob White ;
And mate and I, and our young brood,
When separate—wandering through the wood,
Are killed by sportsmen I invite
By my clear voice—Bob White ! Bob White !
Still, don't you find I'm out of sight
While I am saying Bob White, Bob White ?"

—C. C. M.



From col. F. M. Woodruff.

CHICAGO COLONY TYPE CO

MOUNTAIN PARTRIDGE.
 $\frac{3}{4}$ Life-size.

Copyrighted by
Nature Study Pub. Co., 1898, Chicago.

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

"Father and mother are building a nest ;
They have found in Greenwood the place that is best.
They are working so hard through the long summer day,
Gathering grasses and hair and hay.

They are so happy, for soon they will hear
The eager "Peep, peep !" of their babies so dear.
Dear mother, gather them safe 'neath each wing ;
Kind father, hasten, for food you must bring.

Now mother and father will teach them to fly:
"Come, timid birdies ; come, try ; come, try.
Fly out in the Greenwood, dear birdies, with me ;
Then back to the nest in the dear old tree."

Mrs. Wren was busy that morning. She had been away all winter, among the trees in the south, but was back in the old neighborhood now, getting her house in order for the summer season.

Mr. Wren, with a number of other gentlemen Wrens, had arrived some weeks before and had been kept pretty busy looking about for a desirable apartment in which to set up house-keeping. Several had struck him as being just the thing, among them a gourd which one thoughtful family had set for a Chickadee. "I'll fetch some sticks and straws and put a few in each house," said he, with the greediness of his kind, "so the other birds will think it is rented. Mrs. Wren is so particular maybe none of them will suit her. She always wants something better than Mrs. John Wren, her cousin, and I notice Mr. John looking about in this neighborhood, too."

In the low bushes and shrubbery Mr. Wren flitted from day to day,

keeping his eye on one apartment, especially, which he considered particularly fine.

"I do wish she would hurry up," he thought, anxious for Mrs. Wren to arrive. "It takes a female so long to get ready to go anywhere. I saw an impudent Blue Jay around here this morning and he may take a fancy to that apartment up there. I wouldn't like to tackle him, and so, to let him see that it is rented, I'll fetch a few more straws," and off Mr. Wren flew, returning in a very little while with his bill full.

Well, about the first of April Mrs. Wren arrived, quite tired with her journey, but as sprightly and talkative as ever. Mr. Wren greeted her with one of his loudest songs, and they flew about chattering and singing for quite a while.

"I suppose," said she, resting at length on the limb of a maple tree, "that you have been flying about, eating and drinking and talking with the other Mr. Wrens, and not looking for

a house at all. That is the way with your sex generally; when there is any work to be done."

"Oh, it is?" said Mr. Wren, his feathers ruffled in a minute. "That's my reward for staying about this house and the grounds all the time, is it? My whole time has been taken up in house hunting, let me tell you, Mrs. Wren, and in keeping my eye on one particular apartment which is to let up there."

"Where?" chirped Mrs. Wren, her bright eyes traveling up and down the side of the house before them. "I don't see a box or crevice anywhere."

"Oh, you don't?" said Mr. Wren, mimicing her tone and air, "not a single box or crevice anywhere. Who said anything about either, I'd like to know?"

"Why, you did, Mr. Wren," said Mrs. Jenny, every feather on top of her head standing on end. "You did, as plain as could be."

"I said nothing of the sort," retorted Mr. Wren, "I never mentioned a box or crevice once."

"Then what did you say," returned Mrs. Wren with a little cackling sort of a laugh, "what kind of a house is up there to let anyway?"

"Talk about females being as sharp as we males," muttered Mr. Wren, "I never saw so stupid a creature in my life"—then aloud, "don't you see that tin tea-pot hanging on a nail under the porch, Mrs. Wren?"

"A tin tea-pot!" scornfully. "Do you think a bird born and bred as I was would go to housekeeping in an old tea-pot, Mr. Wren? You forget, surely that my father was a——"

"Oh, bother your father," ungallantly retorted Mr. Wren. "I'm tired and sick of that subject. If you don't like the looks of that house up there say so, and I'll take you to see several others."

"Oh, well," said Mrs. Wren, who all the time had thought the tea-pot just the cutest little apartment in the world, "I'll fly up there and examine it. Maybe it will do."

"It's just lovely," she announced, flying back to the tree, and for a minute or two they chattered and sang, and fluttered about in such a joyful manner that some of their bird neighbors flew over, curious to hear and see.

"Still," remarked Mrs. Jenny the next day, when fetching material for the nest, "I had hoped, my dear, that you would have followed my father's example in selecting a house for your family."

"Still harping on 'my father,'" groaned Mr. Wren, dropping on the porch the straws he had fetched in his bill. "Well," cheerfully, "how did he do, my dear?"

"As a bird of courage would, Mr. Wren. He never looked for a *vacant* house, not he! From place to place, from tree to tree he flew, and when he espied a nest which pleased him, off he chased the other bird and took possession. Bluebird or Martin, it was all the same to him. Ah, indeed, my father was a great warrior."

"Hm, yes!" said Mr. Wren, who didn't like to be thought less brave than another. "That accounted for his one eye and lame leg, I presume."

"The scars of battle are not to be laughed at, Mr. Wren," loftily said

Mrs. Jenny, "Papa's one eye and crooked leg were objects of great pride to his family."

"The old scoundrel," muttered Mr. Wren, who looked upon his father-in-law as no better than a robber, but to keep peace in the family he said no more, and with a gush of song flew off to gather some particularly nice sticks for the nest.

For some days Mr. and Mrs. Wren were too busy to pay much attention to their neighbors. Mr. Wren, unlike some birds he knew, did not do all the singing while his mate did the work, but fetched and carried with the utmost diligence, indeed brought more sticks, Mrs. Wren told her friends, than she had any use for.

"Such a litter, ma'am," said Bridget the next morning to the mistress of the house, "as I do be afther sweepin' up from the porch ivery day. A pair of birds, I do be thinkin', are after building a nest in that owld tin pot on the wall. Its this day I'm goin' to tear it down, so I am. Birds are nuisances anyway, and its not Bridget O'Flaherty that's goin' to be clanin' afther them, at all, at all."

"Oh don't!" chorused the children, we want to see with our own eyes how the birds go to housekeeping in the Spring. Its ever so much better than just reading about it. Tell Bridget, mamma," they pleaded, "to leave the pot alone."

Mamma, who found bird-life a delightful study, was only too willing to give the desired command, and thus it chanced that Mr. and Mrs. Wren grew quite accustomed to many pair of eyes watching them at their work of building a nest, every day.

"Do you know," said Mrs. Wren, placing a particularly fine feather in the nest one day, "that I have a notion to name our birdlings, when they come out of their shell, after our landlady's family? I think it is not more than fair, since we have got a cute apartment and no rent to pay."

"A capital idea!" chirped Mr. Wren, "her children have such pretty names, too."

"And pretty manners," returned Mrs. Wren, who, being of such genteel birth, was quick to recognize it in others. "Let me see, there's just six. Pierre, Emmett, Walter, Henry, Bobby, and that darling little fair-haired girl, Dorothy. I had my head tucked under my wing the other evening, but all the same I heard her speaking a piece that she said she had learned at school that day.

"Yes," said Mr. Wren, tilting his tail over his back and singing loudly, "I think we are very fortunate to have such a family for our neighbors. You can pick up so many things their mamma says to the children, and teach our birdies the same lessons, you know."

"Of course," said Mrs. Wren, standing on the edge of the pot and eyeing her work with great satisfaction, "I had thought of that before. I already have some of her sayings in my mind. But come, we musn't be standing here chattering all day. The nest must be ready to-morrow for the first egg."

"Hm! You don't say?" replied Mr. Wren, beginning to count his toes, "Why, bless me, to-morrow is the twelfth day. Well, well, how time flies when one is busy and happy," and off they both flew, singing as they went for very joy.

SUMMARY.

Page 6.

CROWNED PIGEON.—*Columbidae goura*.

RANGE—New Guinea and the neighboring islands.

Page 10.

RED-EYED VIREO.—*Vireo olivaceus*.

RANGE—Eastern North America, west to Colorado, Utah, and British Columbia; north to the Arctic regions; south in winter, from Florida to northern South America. Breeds nearly throughout its North American range.

NEST—Pensile from horizontal branches of trees, five to twenty feet above the ground; made of vegetable fibres and strips of pliable bark, lined with fine round grasses, horse hairs, and the like.

EGGS—Three or four, pure white, sparsely sprinkled with fine, dark reddish-brown dots, chiefly at the larger end.

Page 14.

FOX SPARROW.—*Passerella iliaca*.

RANGE—Eastern North America, west to the plains and Alaska, and from the Arctic coast south to the Gulf states. Winters chiefly south of the Potomac and Ohio rivers.

NEST—Of grass and moss, lined with grass and fine feathers; on the ground, concealed by the drooping branches of evergreens.

EGGS—Four or five, pale bluish green, speckled, spotted, and blotched with reddish-brown, or uniform chocolate brown.

Page 18.

BOB-WHITE.—*Colinus virginianus*.

RANGE—Eastern United States; west to the Dakotas, Kansas, Indian Territory and eastern Texas; north to southern Maine and Southern Canada; south to the Atlantic and Gulf States.

NEST—On the ground, of grasses, straws, leaves, or weeds.

EGGS—Fifteen to twenty-five, often only twelve, but usually about eighteen, of pure white.

Page 23.

PASSENGER PIGEON.—*Ectopistes migratorius*. Other name: "Wild Pigeon."

RANGE—Eastern North America, from Hudson Bay southward, and west to the Great Plains, straggling thence to Nevada and Washington. Breeding range now mainly restricted to portions of the Canadas and the northern border of the United States, as far west as Manitoba and the Dakotas.

NEST—In trees; a mere platform of sticks.

EGGS—Usually one, never more than two, pure white, and broadly elliptical in shape.

Page 27.

SHORT-EARED OWL.—*Asio accipitrinus*. Other name: "Marsh Owl."

RANGE—Entire North America; nearly cosmopolitan.

NEST—On the ground in the matted grass of marsh land, of a few sticks, soft grasses, and some of its own feathers.

EGGS—Four to seven, white, and oval in shape.

Page 31.

ROSE COCKATOO.—*Cacatua Leadbeateri*.

RANGE—South Australia.

NEST—In holes of decayed trees, or in fissures of rocks.

EGGS—Two, of pure white.

Page 35.

MOUNTAIN PARTRIDGE.—*Oreortyx pictus*. Other name: "Plumed Partridge."

RANGE—Pacific coast from San Francisco north to Washington.

NEST—On the ground, consisting of a bed of dead leaves, under a bush or tuft of grass or weeds.

EGGS—Six to twelve, of a cream color with a reddish tint.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

FEBRUARY, 1898.

No. 2.

GILBERT WHITE AND "SELBORNE."

I SUPPOSE that a habit of minute observation of nature is one of the most difficult things to acquire, as it is one which is less generally pursued than any other study. In almost all departments of learning and investigation there have been numberless works published to illustrate them, and text books would fill the shelves of a large library. Thoreau in his Walden has shown an extremely fine and close observation of the scenes in which his all too short life was passed, but his object does not seem at any time to have been the study of nature from an essential love of it, or to add to his own or the world's knowledge. On the contrary, nature was the one resource which enabled him to exemplify his notions of independence, which were of such a sturdy and uncompromising character that Mr. Emerson, who had suffered some inconvenience from his experience of Thoreau as an inmate of his household, thought him fitter to meet occasionally in the open air than as a guest at table and fireside. There is a delicious harmony with nature in all that he has written, but his descriptions of out-of-door life invite us rather to indolent musing than to investigation or study. Who after reading Izaak Walton ever went a-fishing with the vigor and enterprise of Piscator? Washington Irving allowed his cork to drift with the current and lay down in the shadow of

a spreading oak to dream with the beloved old author.

In White's "Natural History of Selborne" we have a unique book indeed, but of a far more general interest than its title would indicate. Pliny, the elder, was the father of natural history but to many of us Gilbert White is entitled to that honor. To an early edition of the book, without engravings, and much abridged, as compared with Bohn's, published in 1851, many owe their first interest in the subject.

Mr. Ireland in his charming little "Book Lover's Enchiridion," tells us that when a boy he was so delighted with it, that in order to possess a copy of his own (books were not so cheap as now) he actually copied out the whole work. In a list of one hundred books, Sir John Lubbock mentions it as "an inestimable blessing." Edward Jesse, author of "Gleanings in Natural History" attributes his own pursuits as an out-door naturalist entirely to White's example. Much of the charm of the book consists in the amiable character of the author, who

"—lived in solitude, midst trees and flowers,
Life's sunshine mingling with its passing
showers;

No storms to startle, and few clouds to shade
The even path his Christian virtues made."

Very little is known of him beyond what he has chosen to mention in his

diaries, which were chiefly records of his daily studies and observations, and in his correspondence, from which the "history" is in fact made up. From these it is evident that his habits were secluded and that he was strongly attached to the charms of rural life. He says the greater part of his time was spent in literary occupations, and especially in the study of nature. He was born July 18, 1720, in the house in which he died. His father was his first instructor in natural history, and to his brother Thomas, a fellow of the Royal Society, he was indebted for many suggestions for his work. It is also to his brother's influence that we owe the publication of the book, as it required much persuasion to induce the philosopher to pass through the ordeal of criticism, "having a great dread of Reviewers," those incorrigible *bêtes noirs* of authors. His brother promising himself to review the work in the "Gentleman's Magazine," White reluctantly consented to its publication. The following short abstract from the review will show its quality, as well as suggest a possible answer to the current question propounded by students of the census.

"Contemplative persons see with regret the country more and more deserted every day, as they know that every well-regulated family of property which quits a village to reside in a town, injures the place that is forsaken in material circumstances. It is with pleasure, therefore, we observe that so rational an employment of leisure hours as the study of nature promises to become popular, since whatever adds to the number of rural amusements, and consequently counteracts the allurements of the metropolis is, on this consideration, of national importance."

It is to be feared, however, that many stronger influences than this of the study of nature will be necessary to keep the young men of the present day from the great cities. Indeed,

modern naturalists themselves spend the greater part of their lives at the centers of knowledge and only make temporary sallies into the woods and fields to gather data. White was a noble pioneer. The very minuteness—almost painful—of his observation required him to occupy himself for days and weeks and months with what to the average mind would seem of the slightest importance. As an example of his patient investigation, his famous study of the tortoise may be given. It was more than thirty years old when it came into his possession, and for many years—perhaps twenty—we find White watching the habits of the interesting old reptile, until we may assume, he knew all about him and his species.

There are over three hundred and fifty different species of animals and birds treated by White, most of them exhaustively; the beach tree, the elm, and the oak are described and watched from year to year; and the geology and fossil remains of Selborne district are presented. We have daily accounts of the weather, information of the first tree in leaf, the appearance of the first fungi and the plants first in blossom. He tells us when mosses vegetate, when insects first appear and disappear, when birds are first seen and when they migrate—and a thousand other things; all in a style of such simplicity, united with rare scholarship, that it is well worth the attention and imitation of students of the English language. White was educated at Oxford. He had frequent opportunities, 'tis said, of accepting college livings, but his fondness for his native village made him decline all preferment. To this we owe "Selborne" of which Dr. Beardmore, a distinguished scholar, made the prophetic remark to a nephew of White's: Your uncle has sent into the world a publication with nothing to attract attention to it but

an advertisement or two in the newspapers; but depend upon it the time will come when very few who buy books will be without it."

The village was far less attractive than our imaginations would depict it to have been, and the traveler who

would "view fair Selborne aright," according to a contemporary writer, should humor the caprices of the English climate and visit it only when its fields and foliage are clothed in their summer verdure.

—CHARLES C. MARBLE.

A FRIEND OF BIRDS

IT is told of George H. Corliss, the famous engine builder of Providence, R. I., that when building a foundry at the Corliss works, some Blue Birds took the opportunity to build in some holes in the interior framework into which horizontal timbers were to go. The birds flew in and out—as Blue Birds will—and went on with their house-keeping, until in the natural course of things the workmen would have evicted them to put the apertures to their intended use of receiving timbers. But Mr. Corliss interfered and showed how the particular aperture the birds were occupying could be left undisturbed until they were done with it, without any serious delay to the building. So the pair came and went in the midst of the noise of building and brought up their little family safely, and after they had flown away, and not until then, that particular part of the framework was completed.

At another time, Mr. Corliss was working on a contract with the city of Providence to supply a steam pumping apparatus, power house and all, at Sockonosset, and the time was short, and there were forfeitures nominated in the bond for every day beyond a specified date for its completion.

The power house was to be upon virgin soil where were rocks and trees—little trees growing among rocks. In blasting and clearing the necessary place for the foundations of the building, a Robin's nest was discovered in a little tree within the space where the upheavals were to be made. When Mr. Corliss knew this he had the work transferred to the other side of the square or parallelogram around which the digging and blasting were to go, saying that it was just as well to do the other side first.

But it proved that when the workmen had got clear around and back to the Robin's tree, the young birds were still not quite ready to fly. This called for a new exercise of an inventor's power of adapting means to a worthy end. Looking at the little tree with its nest and little birds high in the branches he bade the men support the tree carefully while it was sawed through the trunk a little above the ground, and then carry it in an upright position to a safe distance and stick it into the ground with proper support.

The Robin family continued to thrive after this novel house-moving and all flew away together after a few more days.

QUEER DOINGS OF A CRANE.

A WRITER on "Animal Helpers and Servers" gives a remarkable account of a tame Crane, communicated by Von Seyffert.

Von Seyffert had a pair of tame Cranes which soon lost all fear of man and of domestic animals, and became strongly attached to the former. Their life in a German village, in which agriculture was the sole employment and the communal system of joint herding of cattle and swine and driving them together to the common pasture prevailed, was very much to their taste. They soon knew all the inhabitants in the place and used to call regularly at the houses to be fed. Then the female died and the survivor at once took as a new friend a bull. He stood by the bull in the stall and kept the flies off him, screamed when he roared, danced before him and followed him out with the herd. In this association the Crane learned the duties of cowherd, so that one evening he brought home the whole of the village herd of heifers unaided and drove them into the stable. From that time the Crane

undertook so many duties that he was busy from dawn till night. He acted as policeman among the poultry, stopping all fights and disorder. He stood by a horse when left in a cart and prevented it from moving by pecking its nose and screaming. A Turkey and a Game Cock were found fighting, whereon the Crane first fought the Turkey, then sought out and thrashed the cock. Meantime it herded the cattle, not always with complete success. The bovines were collected in the morning by the sound of a horn and some would lag behind. On one occasion the Crane went back, drove up some lagging heifers through the street and then frightened them so much that they broke away and ran two miles in the wrong direction. The bird could not bring them back, but drove them into a field, where it guarded them until they were fetched. It would drive out trespassing cattle as courageously as a dog and, unlike most busybodies, was a universal favorite and pride of the village.—*Cornhill Magazine*.



From col. Chl. Acad. Sciences.

LEAST BITTERN.
 $\frac{2}{3}$ Life-size.

Copyright 1908, Chicago,
Nature Study Pub. Co., 1908, Chicago.

THE LEAST BITTERN.

THROUGHOUT the whole of temperate North America and tropical America to Brazil, this, the smallest of the Bittern family, is a well-known bird, but being a nocturnal species, inhabiting the almost inaccessible swamps and boggy lands that are covered with a dense growth of canes, reeds, and rushes, it is seldom met with. Mr. Davis calls it an extremely interesting little bird, of quiet, retiring habits. In some places as many as a dozen or twenty pairs breed along the grassy shores of a small lake or pond. The nest is placed on the ground or in the midst of the rankest grass, or in a bush. It is often placed on floating bog, and is simply a platform of dead rushes.

This bird has many odd habits. When standing on the edge of a stream, with its neck drawn in, it is often

taken for a Woodcock, the long bill giving it this appearance. It is so stupid at times that it may be caught with the hand.

The Least Bittern is usually seen just before or after sunset. When startled it utters a low *gua*, and in daylight flies but a short distance, in a weak, uncertain manner, but at dusk it flaps along on strong easy wing, with neck drawn in and legs extended.

The eggs of this species are usually from two to six in number, and of a pale bluish or greenish white. If approached while on the nest, the female generally steps quietly to one side, but if suddenly surprised, takes to flight.

The Least Bittern is known by many local names. In Jamaica it is called Tortoise-shell Bird and Minute Bittern, and in many localities Little Bittern.

“All Nature is a unit in herself,
Yet but a part of a far greater whole.
Little by little you may teach your child
To know her ways and live in harmony
With her; and then, in turn, help him through her
To find those verities within himself,
Of which all outward things are but the type.
So when he passes from your sheltering care
To walk the ways of men, his soul shall be
Knit to all things that are, and still most free;
And of him shall be writ at last this word—
‘At peace with nature, with himself, and God.’ ”

THE BALD-PATE DUCK.

"There seem to be as many Ducks as there are Owls," remarks Bobbie. "This fellow is called Bald-pate, but he's not bare on top of his head like Gran'pa, at all."

"No, his head is feathered as well as any Duck's head," replies mamma. "I remember hearing him called the Widgeon, I think."

"Yes, that's what it says here, the American Widgeon, a game bird, you know, mamma."

"Yes, its flesh is very delicious, almost as good as the Canvas-back."

"Oh, but these Bald-pates are cunning fellows," exclaims Bobbie, continuing his reading, "It says they are fond of a certain grass plant which grows deep in both salt and fresh water, but they don't dive for it as the Canvas-back and other deep water Ducks do."

"Well?" says mamma, as Bobbie stops, his lips moving, but uttering no sound.

"I stopped to spell a word," explains Bobbie. "It says they closely follow and watch the Canvas-back and other Ducks, and when they rise to the surface of the water with the roots of the plant in their bills, Mr. Bald-pate quickly snatches a part, or all of the catch, and

hurries off to eat it at his leisure."

"A mean fellow, indeed," remarks mamma, "but he has no reason to guide him, as you have, you know."

"Indeed I *don't* know," quickly says Bobbie. "You remember that story about the imprisoned Duck that had its leg broken and was put under a small crate, or coop, to keep it from running about? Well, some of the other Ducks pitied the little prisoner and tried to release him by forcing their necks under the crate and thus lifting it up. They found they weren't strong enough to do that, and so they *quacked*, and *quacked*, and *quacked* among themselves, then marched away in a body. Soon they came back with forty ducks, every one in the farm yard. They surrounded the crate and tried to lift it as before, but again they failed. Then they *quacked* some more, and after a long talk the whole of them went to one side of the crate. As many as could thrust their necks underneath it, and the rest pushed them forward from behind. A good push, a strong push, up went the crate a little way, and out waddled the little prisoner. I want to know if they didn't reason that out, mamma?"



From col. Chl. Acad. Sciences.

BALD-PATE DUCK.
 $\frac{1}{2}$ Life-size.

Copyright
by
Nature Study Pub. Co., 1898, Chicago.

THE BALDPATE.

We would have you to wit, that on eggs though we sit,
And are spiked on a spit, and are baked in a pan,
Birds are older by far than your ancestors are,
And made love and made war, ere the making of man !
—ANDREW LANG.

THERE is much variation in the plumage of adult males of this species of Widgeon, but as Dr. Coues says : " The bird cannot be mistaken under any condition ; the extensive white of the under parts and wings is recognizable at gun-range." The female is similar, but lacks the white crown and iridescence on the head.

The Baldpate ranges over the whole of North America. In winter it is common in the Gulf states and lower part of the Mississippi Valley. Cooke says it breeds chiefly in the north, but is known to nest in Manitoba, the Dakotas, Minnesota, Nebraska, Kansas, Illinois, and Texas. Throughout the whole of British America, as far north as the Arctic ocean, it is very abundant. In October and April it visits in large numbers the rivers and marshes, as well as both sea coasts, of the northern United States, and is much sought by hunters, its flesh being of the finest quality, as when in good condition it cannot easily be distinguished from that of the Canvas-back. It is regarded by hunters as a great nuisance. It is not only so shy that it avoids the points of land, but by its whistling and confused manner of flight is said to alarm the other species. During its stay in the waters of the Chesapeake, it is the constant companion of the Canvas-backs, upon whose superiority in diving it depends in a large degree for its food, stealing from them, as they rise to the surface of the water, the tender roots of the plant of which both are so fond—*vallisneria* grass, or wild celery.

The Baldpate is said to visit the rice fields of the south during the winter in considerable numbers. It winters in the Southern states, Mexico, and the West Indies. In the north, the Widgeon exhibits a greater preference for rivers and open lakes than most of the other fresh-water Ducks.

The favorite situation of the nest is remarkable, for while the other Ducks—except, perhaps, the Teal, according to Mr. Kennicott—choose the immediate vicinity of water, he found the Baldpate always breeding at a considerable distance from it. Several of the nests observed on the Yukon were fully half a mile from the nearest water. He invariably found the nest among dry leaves, upon high, dry ground, either under large trees or in thick groves of small ones—frequently among thick spruces. The nest is small, simply a depression among the leaves, but thickly lined with down, with which after setting is begun, the eggs are covered when left by the parent. They are from eight to twelve in number, and pale buff. The food of the Baldpate consists of aquatic insects, small shells, and the seeds and roots of various plants.

The call of this bird is a plaintive whistle of two and then three notes of nearly equal duration. Col. N. S. Goss states that, as a rule, Widgeons " are not shy, and their note, a sort of *whew, whew, whew*, uttered while feeding and swimming, enables the hunter to locate them in the thickest growth of water plants."

WOOING BIRDS' ODD WAYS.

F all the interesting points on which Mr. Dixon touches in his "Curiosities of Bird Life," perhaps none is more remarkable than the strange antics in which some birds indulge, especially at the pairing season. With what odd gestures will a smartly dressed Cock-sparrow, for instance, endeavor to cut a good figure in the eyes of his demure and sober-tinted lady-love!

To a similar performance, though with more of dignity and action about it, the Blackcock treats his wives, for, unlike the better conducted though often much calumniated sparrow, he is not satisfied with a single mate. One of the most characteristic of spring sounds on Exmoor, as evening darkens, or, still more, in the early hours of the morning, is the challenge of the Blackcock. In the month of April he who is abroad early enough may watch, upon the russet slopes of Dunkery, a little party of Blackcock at one of their recognized and probably ancestral meeting-places, by one of the little mooreland streams, or on the wet edge of some swampy hollow. Each bird crouches on a hillock, in the oddest of attitudes—its head down, its wings a-droop, its beautiful tail raised—and utters at intervals strange, almost weird notes, sometimes suggestive of the purr of a Turtle-dove, and sometimes more like the cry of chamois.

Presently an old cock, grand in his new black coat, will get up and march backward and forward with his neck stretched out and his wings trailing on the ground. Now he leaps into the air, sometimes turning right round before he alights, and now again he crouches close upon his hillock. It is said that in places where black game are few a single cock will go through all this by himself, or at least with only his wives for witnesses. But if there are more cocks than one, the

proceedings generally end with a fight. Where the birds are numerous the young cocks, who are not allowed to enter the arena with their elders, hold unauthorized celebrations of their own.

There are many birds which thus, like higher mortals, have their fits of madness in the days of courtship. But there are some, such as the spur-winged Lapwing of La Plata, which are, like the lady in the song, so fond of dancing, especially of what the natives call their serious dance, meaning a square one, that they indulge in such performances all the year, not in the daytime only, but even on moonlight nights. "If," says Mr. Hudson, who tells the story, "a person watches any two birds for some time—for they live in pairs—he will see another Lapwing, one of a neighboring couple, rise up and fly to them, leaving his own mate to guard their chosen ground, and instead of resenting this visit as an unwarranted intrusion on their domain, as they would certainly resent the approach of almost any other bird, they welcome it with notes and signs of pleasure. Advancing to the visitor, they place themselves behind it; then all three keeping step, begin a rapid march, uttering resonant drumming notes in time with their movements; the notes of the pair behind them being emitted in a stream, like a drum roll, while the leader utters loud single notes at regular intervals. The march ceases; the leader elevates his wings and stands motionless and erect, still uttering loud notes, while the other two with puffed-out plumage, and standing exactly abreast, stoop forward and downward until the top of their beaks touch the ground, and, sinking their rhythmical voices to a murmur, remain for some time in this posture. The performance is then over and the visitor goes back to his own ground and mate, to receive a visitor himself later on."—*London Daily News*.



From col. Chi. Acad. Sciences.

PURPLE FINCH.
 $\frac{3}{4}$ Life size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE PURPLE FINCH.

"The wind blows cold, the birds are still,
And skies are gray."

PURPLE GROSBEAK, Crimson Finch, Strawberry Bird, and Linnet are some of the common names by which this bird of bright colors, sweet song, and sociable disposition is known. It is very numerous in New England, but is found nesting regularly in the northern tier of states, North and South Dakota, Minnesota, Wisconsin, Michigan, etc., northward, and it is said to breed in northern Illinois. In Nova Scotia it is exceedingly abundant.

Robert Ridgway says he first made the acquaintance of the Purple Finch at Mt. Carmel, in mid-winter, "under circumstances of delightful memory. The ground was covered with snow,—the weather clear and bright, but cold. Crossing a field in the outskirts of the town, and approaching the line of tall, dead rag-weeds which grew thickly in the fence corners, a straggling flock of birds was startled, flew a short distance, and again alighted on the tall weed-stalks, uttering as they flew, a musical, metallic *chink, chink*. The beautiful crimson color of the adult males, heightened by contrast with the snow, was a great surprise to the writer, then a boy of thirteen, and excited intense interest in this, to him, new bird. On subsequent occasions during the same winter, they were found under like circumstances, and also in 'sycamore' or buttonwood trees, feeding on the small seeds contained within the balls of this tree."

Dr. Brewer says that the song of the Purple Finch resembles that of the

Canary, and though less varied and powerful, is softer, sweeter, and more touching and pleasing. The notes may be heard from the last of May until late in September, and in the long summer evening are often continued until it is quite dark. Their song has all the beauty and pathos of the Warbling Vireo, and greatly resembles it, but is more powerful and full in tone. It is a very interesting sight to watch one of these little performers in the midst of his song. He appears perfectly absorbed in his work,—his form is dilated, his crest is erected, his throat expands, and he seems to be utterly unconscious of all around him. But let an intruder of his own race appear within a few feet of the singer, the song instantly ceases, and in a violent fit of indignation, he chases him away. S. P. Cheney says that a careful observer told him that he had seen the Linnet fly from the side of his mate directly upward fifteen or twenty feet, singing every instant in the most excited manner till he dropped to the point of starting. The Yellow-breasted Chat has a like performance. See Vol. II of BIRDS, p. 238.

The nest of the Finch is usually placed in evergreens or orchard trees, at a moderate distance from the ground. It is composed of weed-stalks, bark strips, rootlets, grasses, and vegetable fibres, and lined with hair. The eggs are four or five in number, dull green, and spotted with dark brown.

Study his picture and habits and be prepared to welcome this charming spring visitant.

THE RED-BELLIED WOODPECKER.

A little Woodpecker am I,
And you may always know
When I am searching for a worm,
For tap, tap, tap, I go.

Oh yes, I am proud of my appearance, but really I am not proud of my name. Sometimes I am called the "Zebra Bird," on account of the bands of white and black on my back and wings. That is a much prettier name, I think, than the Red-bellied Woodpecker, don't you? Certainly it is more genteel.

I know a bird that is called the Red-eyed Vireo, because his eyes are red. Well, my eyes are red, too. Then why not call me the Red-eyed Woodpecker? Still the Woodpeckers are such a common family I don't much care about that either.

In the last February number of BIRDS that saucy red-headed cousin of mine had his picture and a letter. Before very long the Red-cockaded Woodpecker will have his picture taken too, I suppose.

Dear, dear ! If all the Woodpeckers are going to write to you, you will have a merry time. Why, I can count twenty-four different species of that family and I have only four fingers, or toes, to count on, and you little folks have five. There may be more of them, Woodpeckers I mean, for all I know.

Speaking about toes! I have two in front and two behind. There are some Woodpeckers that have only three, two in front and one behind. It's a fact, I assure you. I thought I would tell you about it before one of the three toed fellows got a chance to write to you about it himself.

I am not so shy and wary a bird as some people think I am. When I want an insect, or worm, I don't care how many eyes are watching me, but up the tree I climb in my zig-zag fashion, crying *chaw-chaw*, or *chow-chow* in a noisy sort of way. Sometimes I say *chuck, chuck, chuck!* The first is Chinese, and the last English, you know. You might think it sounded like the bark of a small dog, though.

I am fond of flies and catch them on the wing. I like ripe apples, too ; and oh, what a *good* time I have in winter raiding the farmer's corn crib! I have only to hammer at the logs with my sharp bill, and soon I can squeeze myself in between them and eat my fill. I understand the farmer doesn't like it very much.



From col. Chi. Acad. Sciences

RED-BELLIED WOODPECKER.
 $\frac{3}{4}$ Life-size

Copyright by
Nature Study Pub. Co., 1898, Chicago

THE RED BELLIED WOODPECKER.

“**Z**EBRA BIRD” is the name by which this handsome Woodpecker will be recognized by many readers. Some regard it as the most beautiful of the smaller species of its tribe. As may be seen, the whole crown and nape are scarlet in the male. In the female they are only partly so, but sufficiently to make the identification easy. A bird generally of retired habits, seeking the deepest and most unfrequented forests to breed, it is nevertheless often found in numbers in the vicinity of villages where there are a few dead and partially decayed trees, in which they drill their holes, high up on a limb, or in the bole of the tree. When engaged in hammering for insects it frequently utters a short, singular note, which Wilson likens to the bark of a small dog. We could never liken it to anything, it is so characteristic, and must be heard to be appreciated. *Chaw, chaw*, repeated twice, and with vigor, somewhat resembles the hoarse utterance.

Prof. D. E. Lantz states that this species in the vicinity of Manhattan, Kansas, exhibits the same familiarity as the Flicker, the Red-headed and Downy Woodpeckers. About a dozen nests were observed, the excavations ranging usually less than twenty feet from the ground. One nest in a burrow of a large dead limb of an elm

tree was found May 12, and contained five eggs. The birds are very much attached to their nests. If the nest is destroyed by man or beast, the birds almost immediately begin excavating another nest cavity for the second set, always in the vicinity of the first nest, often in the same tree.

In its search for food, the “Zebra Bird,” regardless of the presence of man, climbs in its usual spiral or zig-zag manner the trees and their branches “boldly uttering now and then its familiar *chaw, chaw*, darting off occasionally to catch a passing insect upon the wing. Its flight is undulating, and its habits in many respects are like those of the Red-headed, but it is not so much of an upland bird, or lover of berries and fruits, and therefore more respected by the farmer. In contest with the Red-head it is said to be invariably vanquished.

The North American family of Woodpeckers — consisting of about twenty-five species—is likely to be brought together in BIRDS for the first time. We have already presented several species, and will figure others as we may secure the finest specimens. Occasionally a foreign Woodpecker will appear. About three hundred and fifty species are known, and they are found in all the wooded parts of the world except Australia and Madagascar.

A FORCED PARTNERSHIP.

A pair of Robins had made their nest on the horizontal branch of an evergreen tree which stood near a dwelling house, and the four young had hatched when a pair of English Sparrows selected the same branch for their nest. When the Robins refused to vacate their nest, the Sparrows proceeded to build theirs upon the outside of the Robin's nest. To this the Robins made no objection, so both families lived and thrived together on the same branch, with nests touching. The young of both species developed normally, and in due time left their nests. The branch bearing both nests is now preserved in the college museum.—*Oberlin College Bulletin.*

WHAT IS AN EGG?

How many people crack an egg, swallow the meat, and give it no further thought. Yet, to a reflective mind the egg constitutes, it has been said, the greatest wonder of nature. The highest problems of organic development, and even of the succession of animals on the earth, are embraced here. "Every animal springs from an egg," is a dictum of Harvey that has become an axiom.

In an egg one would suppose the yolk to be the animal. This is not so.

It is merely food—the animal is the little whitish circle seen on the membrane enveloping the yolk.

We hope to group a number of eggs, to enable our readers to compare their size and shape, from that of the Epyornis, six times the size of an Ostrich egg, down to the tiny egg that is found in the soft nest of the Humming-bird. This gigantic egg is a foot long and nine inches across, and would hold as much as fifty thousand Humming-bird's eggs.

THE SAW-WHET OWL.

"The Lark is but a bumpkin fowl;
He sleeps in his nest till morn;
But my blessing upon the jolly Owl
That all night blows his horn."

A CURIOUS name for a bird, we are inclined to say when we meet with it for the first time, but when we hear its shrill, rasping call note, uttered perhaps at midnight, we admit the appropriateness of "saw-whet." It resembles the sound made when a large-toothed saw is being filed.

Mr. Goss says that the natural home of this sprightly little Owl is within the wild woodlands, though it is occasionally found about farm houses and even cities. According to Mr. Nelson, it is of frequent occurrence in Chicago, where, upon some of the most frequented streets in the residence portion of the city, a dozen specimens have been taken within two years. It is very shy and retiring in its habits, however, rarely leaving its secluded retreats until late at eve, for which reason it is doubtless much more common throughout its range than is generally supposed. It is not migratory but is more or less of an irregular wanderer in search of food during the autumn and winter. It may be quite common in a locality and then not be seen again for several years. It is nocturnal, seldom moving about in the day time, but passing the time in sleeping in some dark retreat; and so soundly does it sleep that oftentimes it may be captured alive.

The flight of the Saw-whet so closely resembles that of the Woodcock that it has been killed by sportsmen, when flying over the alders, through being mistaken for the game bird.

These birds nest in old deserted squirrel or Woodpecker holes and small hollows in trees. The eggs—usually four—are laid on the rotten wood or decayed material at the bottom. They are white and nearly round.

In spite of the societies formed to prevent the killing of birds for ornamenting millinery, and the thousands of signatures affixed to the numerous petitions sent broadcast all over the country, in which women pledged themselves not to wear birds or feathers of any kind on their hats, this is essentially a bird killing year, and the favorite of all the feathers is that of the Owl. There is an old superstition about him too. He has always been considered an unlucky bird, and many persons will not have one in the house. He may, says a recent writer, like the Peacock, lose his unlucky prestige, now that Dame Fashion has stamped him with her approval. Li Hung Chang rescued the Peacock feather from the odium of ill luck, and hundreds of persons bought them after his visit who would never permit them to be taken inside their homes prior to it. So the Owl seems to have lost his ill luck since fair woman has decided that the Owl hat is "the thing."

The small size of the Saw-whet and absence of ears, at once distinguish this species from any Owl of eastern North America, except Richardson's, which has the head and back spotted with white, and legs barred with grayish brown.

THE SAW-WHET OWL.

"Whew!" exclaims Bobbie. "Here's another Owl. I never knew there were so many different species, mamma."

Mamma smiled at that word "species." It was a word Bobbie had learned in his study of BIRDS.

"The *Saw-Whet Owl*," said she, looking at the picture. "A good looking little fellow, but not handsome as the Snowy Owl in the June number of BIRDS."

"He *was* a beauty," assented Bobby, "such great yellow eyes looking at you out of a snow bank of feathers. This little fellow's feet have on black shoes with yellow soles, not white fur overshoes like the *Snowy Owl's*."

"His eyes glow like topaz, though, just as the other's did," said mamma. "Let us see what he says about himself."

"As stupid as an Owl. That's the way some people talk about us. Then again I've heard them say, 'tough as a b'iled owl.' B'iled Owls may be tough, I don't know anything about that, for I have been too shy and wary to be caught."

"I had a neighbor once who was very fond of chickens. He was a Night Owl and said he found it easy to catch them when roosting out at night. Well he caught so many that Mr. Owl

grew very fat, and the farmer whose chickens he ate, caught, cooked, and ate him. His flesh, the farmer said, was tender and sweet. So, my little friends, when you want to call anything 'tough,' don't mention the Owl any more."

"A foreigner?"

"Oh, my, no! I'm proud to say I am an American, and so are all my folks. A branch of the family, however, live way up north in a region where they sing 'God save the Queen' instead of the 'Star Spangled Banner.' They call themselves English Owls, I guess, because they live on British soil."

"Do I sing?"

"Well, not exactly. I can hoot though, and my *Ah-ee, ah-ee, ah-oo, ah-oo*, has a pleasant sound, very much like filing a saw. That is the reason they call me the Saw-whet Owl. My mate says it doesn't sound that way to her, but then as she hasn't any ears maybe she doesn't hear very well.

"You never see me out in the day time, no indeed! I know when the mice come out of their holes; I am very fond of mice, also insects. I like small birds, too—to eat—but I find them very hard to catch."

"Don't you?"



From col. Chi. Acad. Sciences.

SAW-WHET OWL.
" ; Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE BLACK SWAN.

I advise you little folks to take a good look at me. You don't often see a Black Swan. White Swans are very common, common as white Geese. I only wish I could have had my picture taken while gliding through the water. I am so stately and handsome there. My feet wouldn't have shown either.

Really I don't think my feet are pretty. They always remind me when I look down at them of a windmill or the sails of a vessel. But if they hadn't been made that way, webbed-like, I wouldn't be able to swim as I do. They really are a pair of fine paddles, you know.

There was a time when people in certain countries thought a Black Swan was an impossibility. As long as there were black sheep in the world, I don't see why there shouldn't have been Black Swans, do you?

Well, one day, a Dutch captain exploring a river in Australia, saw and captured four of the black fellows. That was way back in sixteen hundred and something, so that one of those very Black Swans must

have been my great, great, great, *great* grand father. Indeed he may have been even greater than that, but as I have never been to school, you know, I can't very well count backward. I can move forward, however, when in the water. I make good time there, too.

Well, to go back to the Dutch captain. Two of the Swans he took alive to Dutchland and everybody was greatly surprised. They said "Ach!" and "Himmel," and many other things which I do not remember. Since that time they say the Black Swans have greatly diminished in numbers in Australia. You will find us all over the world now, because we are so ornamental; people like to have a few of us in their ponds and lakes.

They say that river in Australia which the captain explored was named Swan river, and Australia took one of us for its armorial symbol. Well, a Black Swan may look well on a shield, but no matter how hard you may pull his tail-feathers, he'll never scream like the American Eagle.

THE BLACK SWAN.

AUSTRALIA is the home of the Black Swan, and it is invested by an even greater interest than attaches to the South American bird, which is white. For many centuries it was considered to be an impossibility, but by a singular stroke of fortune, says a celebrated naturalist, we are able to name the precise day on which this unexpected discovery was made. The Dutch navigator William de Vlaming, visiting the west coast of Southland, sent two of his boats on the 6th of January, 1697, to explore an estuary he had found. There their crews saw at first two and then more Black swans, of which they caught four, taking two of them alive to Batavia; and Valentyn, who several years later recounted this voyage, gives in his work a plate representing the ship, boats, and birds, at the mouth of what is now known from this circumstance as the Swan river, the most important stream of the thriving colony of West Australia, which has adopted this Swan as its armorial symbol. Subsequent voyagers, Cook and others, found that the range of the species extended over the greater part of Australia, in many districts of which it was abundant. It has since rapidly decreased in number there, and will most likely soon cease to exist as a wild bird, but its singular and ornamental appearance will probably preserve it as a modified captive in most civilized countries, and it is said, perhaps even now there are more Black Swans in a reclaimed condition in other lands than are at large in their mother country.

The erect and graceful carriage of the Swan always excites the admiration of the beholder, but the gentle bird has other qualities not commonly known, one of which is great power of wing. The *Zoologist* gives a curious incident relating to this subject. An American physician writing to that journal, says that the first case of fracture with which he had to deal was one of the forearm caused by the blows of a Swan's wing. It was during the winter of 1870, at the Lake of Swans, in Mississippi, that the patient was hunting at night, in a small boat and by the light of torches. In the course of their maneuvers a flock of Swans was suddenly encountered which took to flight without regard to anything that might be in the way. As the man raised his arm instinctively to ward off the swiftly rising birds, he was struck on his forearm by the wing of one of the Swans in the act of getting under motion, and as the action and labor of lifting itself were very great, the arm was badly broken, both bones being fractured.

When left to itself the nest of the Swan is a large mass of aquatic plants, often piled to the height of a couple of feet and about six feet in diameter. In the midst of this is a hollow which contains the eggs, generally from five to ten in number. They sit upon the eggs between five and six weeks.

It is a curious coincidence that this biographical sketch should have been written and a faithful portrait for the first time shown on the two hundredth anniversary of the discovery of the Black Swan.



From col. Chi. Acad. Sciences.

BLACK SWAN.
 $\frac{1}{4}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

LIFE IN THE NEST.

Blithely twitting, gayly flitting
Thro' the budding glen;
Golden-crested, sunny-breasted,
Goes the tiny Wren.
Peeping, musing, picking, choosing,
Nook is found at last ;
Moss and feather, twined together—
Home is shaped at last.

Brisk as ever, quick and clever,
Brimming with delight—
Six wee beauties, bring new duties,
Work from morn to night.
Peeping, musing, picking, choosing,
Nook is found at last ;
Moss and feather, twined together—
Home is shaped at last.

—J. L. H.

THE SNOWY PLOVER.

ABOUT one hundred species are comprised in the Plover family, which are distributed throughout the world.

Only eight species are found in North America. Their habits in a general way resemble those of the true Snipes, but their much shorter, stouter bills are not fitted for probing, and they obtain their food from the surface of the ground. Probably for this reason several species are so frequently found on the uplands instead of wading about in shallow ponds or the margins of streams. They frequent meadows and sandy tracts, where they run swiftly along the ground in a peculiarly graceful manner. The Plovers are small or medium-sized shore-birds. The Snowy Plover is found chiefly west of the Rocky Mountains, and is a constant resident along the California coast. It nests along the sandy beaches of the ocean. Mr. N. S. Goss found it nesting on the salt plains along the Cimarron River in the Indian Territory, the northern limits of which extend into southwestern Kansas. The birds are described as being very much lighter in color than those of California. Four eggs are usually laid, in ground color, pale buff or clay color, with blackish-brown markings. Mr. Cory says the nest is a mere depression in the sand. He says also that the Snowy Plover is

found in winter in many of the Gulf States, and is not uncommon in North-western Florida.

When the female Snowy Plover is disturbed on the nest she will run over the sand with outstretched wings and distressing gait, and endeavor to lead the trespasser away from it. It sometimes utters a peculiar cry, but is usually silent. The food of these birds consists of various minute forms of life. They are similar in actions to the Semipalmated (see July BIRDS), and fully as silent. Indeed they are rarely heard to utter a note except as the young are approached—when they are very demonstrative—or when suddenly flushed, which, in the nesting season, is a very rare thing, as they prefer to escape by running, dodging, and squatting the moment they think they are out of danger, in hopes you will pass without seeing them as the sandy lands they inhabit closely resemble their plumage in color, and says Mr. Goss, you will certainly do so should you look away or fail to go directly to the spot.

The first discovery of these interesting birds east of Great Salt Lake was in June, 1886. A nest was found which contained three eggs, a full set. It was a mere depression worked out in the sand to fit the body. It was without lining, and had nothing near to shelter or hide it from view.



From col. Chi. Acad. Sciences.

SNOWY PLOVER.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

ONLY A BIRD.

Only a bird ! and a vagrant boy
Fits a pebble with boyish skill
Into the folds of a supple sling.
" Watch me hit him. I can, an' I will."
Whirr ! and a silence chill and sad
Falls like a pall on the vibrant air,
From a birchen tree, whence a shower of song
Has fallen in ripples everywhere.

Only a bird ! and the tiny throat
With quaver and trill and whistle of flute
Bruised and bleeding and silent lies
There at his feet. Its chords are mute.
And the boy with a loud and boisterous laugh,
Proud of his prowess and brutal skill,
Throws it aside with a careless toss.
" Only a bird ! it was made to kill."

Only a bird ! yet far away
Little ones clamor and cry for food—
Clamor and cry, and the chill of night
Settles over the orphan brood.
Weaker and fainter the moaning call
For a brooding breast that shall never come.
Morning breaks o'er a lonely nest,
Songless and lifeless ; mute and dumb.

—MARY MORRISON.

THE LESSER PRAIRIE HEN.

EXTENDING over the Great Plains from western and probably southern Texas northward through Indian Territory to Kansas is said to be the habitation of the Lesser Prairie Hen, though it is not fully known. It inhabits the fertile prairies, seldom frequenting the timbered lands, except during sleety storms, or when the ground is covered with snow. Its flesh is dark and it is not very highly esteemed as a table bird.

The habits of these birds are similar to those of the Prairie Hen. During the early breeding season they feed upon grasshoppers, crickets, and other forms of insect life, but afterwards upon cultivated grains, gleaned from the stubble in autumn and the corn fields in winter. They are also fond of tender buds, berries, and fruits. When flushed, these birds rise from the ground with a less whirring sound than the Ruffed Grouse or Bob White, and their flight is not as swift, but more protracted, and with less apparent effort, flapping and sailing along, often to the distance of a mile or more. In the fall the birds come together, and remain in flocks until the warmth of spring awakes the passions of love; then, in the language of Col. Goss, as with a view to fairness and the survival of the fittest, they select a smooth, open courtship

ground, usually called a scratching ground, where the males assemble at the early dawn, to vie with each other in carnage and pompous display, uttering at the same time their love call, a loud, booming noise. As soon as this is heard by the hen birds desirous of mating, they quietly appear, squat upon the ground, apparently indifferent observers, until claimed by victorious rivals, whom they gladly accept, and whose caresses they receive. Audubon states that the vanquished and victors alike leave the grounds to search for the females, but he omits to state that many are present, and mate upon the "scratching grounds."

The nest of the Prairie Hen is placed on the ground in the thick prairie grass and at the foot of bushes when the earth is barren; a hollow is scratched in the soil, and sparingly lined with grasses and a few feathers. There are from eight to twelve eggs, tawny brown, sometimes with an olive, hue and occasionally sprinkled with brown.

During the years 1869 and 1870, while the writer was living in southwestern Kansas, which was then the far west, Prairie Chickens as they were called there, were so numerous that they were rarely used for food by the inhabitants, and as there was then no readily accessible market the birds were slaughtered for wanton sport.



From col. Ch. Acad. Sciences.

LESSER PRAIRIE HEN.
 $\frac{1}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1888, Chicago.

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

The next day Mrs. Jenny retired into the tin pot, and later, when Mr. Wren peeped in, lo! an egg, all spotted with red and brown, lay upon the soft lining of the nest.

"It's quite the prettiest thing in the world," proudly said Mr. Wren. "Why, my dear, I don't believe your cousin, Mrs. John Wren, ever laid one like it. It seems to me those spots upon the shell are very remarkable. I shouldn't be surprised if the bird hatched from that shell will make a name for himself in bird-land some day, I really shouldn't."

"You foolish fellow," laughed Mrs. Wren, playfully pecking him with her bill, "If you were a Goose your Goslings, in your eyes, would all be Swans. That's what I heard our landlady say to her husband last night, out on the porch, when he wondered which one of his boys would be president of the United States."

Mr. Wren chuckled in a truly papa-like manner and pecked her bill in return, then fairly bubbling over with happiness flew to a neighboring limb, and burst into such a merry roundelay, one note tumbling over another in Wren fashion, that every member of the household came out to hear and see.

"There he is," cried Pierre, as Mrs. Wren left her nest and flew over beside

him, "with tail down and head up, singing as though he were mad with joy."

"Such a rapturous song," said mamma. "It reminds me of two almost forgotten lines:

'Brown Wren, from out whose swelling throat
Unstinted joys of music float.'"

"How well we are repaid for the litter they made, are we not?"

"And sure, mum," said Bridget, whose big heart had also been touched by the sweet song, "its glad I am, for sure, that I wasn't after disposessin' your tinents. Its innocent craythurs they be, God bless 'em, a harmin' ov no wan. Sthill—"

"Well," queried her mistress, as Bridget paused.

"Sthill, mum, I do be after wonderin' if the tin-pot had been a hangin' under the front porch instead of the back, would ye's been after takin' the litter so philosophyky like as ye have, mum, to be sure."

The mistress looked at Bridget and laughingly shook her head.

"That's a pretty hard nut to crack, Bridget," said she. "Under those conditions I am afraid I——" What ever admission she was going to make was cut short by a burst of laughter from the children.

"Look at him, mamma, just look at him," they cried, pointing to Mr. Wren,

who, too happy to keep still had flown to the gable at the extremity of the ridge-pole of the house, and after a gush of song, to express his happiness was jerking himself along the ridge pole in a truly funny fashion. From thence he flew into the lower branches of a neighboring tree, singing and chattering, and whisking himself in and out of the foliage: then back to the roof again, and from roof to tree.

"I know what makes him so happy," announced Henry, who, standing upon a chair, had peeped into the nest. "There's a dear little egg in here. Hurrah for Mrs. Wren!"

"Do not touch it," commanded mamma, "but each one of us will take a peep in turn."

Mrs. Wren's bead like eyes had taken in the whole proceeding, and with fluttering wings she stood on a shrub level with the porch and gave voice to her motherly anxiety and anger.

"*Dee, dee, dee,*" she shrilly cried, fluttering her little wings, which in bird language means, "oh dear, oh dear, what shall I do?"

Her cries of distress were heard by Mr. Wren, and with all haste he flew down beside her.

"What is it?" cried he, very nearly out of breath from his late exertions. "Has that rascally Mr. Jay——"

"No, no!" she interrupted, wringing her sharp little toes, "It's not Mr. Jay this time, Mr. Wren. It's the family over there, *our* family, robbing our nest of its one little egg."

"Pooh! nonsense!" coolly said Mr. Wren, taking one long breath of relief. "Why, my dear, you nearly frighten me to death. You know, or *ought* to

know by this time, that our landlord's family have been taught not to do such things. Besides you yourself admit them to be exceptionally good children and good children never rob nests. Fie, I'm ashamed of you. Really my heart flew to my bill when I heard your call of distress."

Mrs. Wren, whose fears were quite allayed by this time, looked at her mate scornfully.

"Oh!" said she, with fine sarcasm, "your heart flew into your bill did it? Well, let me say, Mr. Wren, that if it had been my mother in distress, father at the first note of warning, would have flown to her assistance with his heart in his *claws*. He kept them well sharpened for just such occasions, and woe to any enemy *he* found prowling about his premises."

"Oh, indeed!" said Mr. Wren, "I presume he would have attacked Bridget over there, and the whole family. To hear you talk, Mrs. Wren, one would think your father was a whole host in himself."

"And so he was," said she, loftily, "I have seen him attack a *Bluebird* and a *Martin* at the same time and put them both to flight. An *Owl* had no terrors for him, and as for squirrels, why——" Mrs. Wren raised her wings and shrugged her shoulders in a very Frenchy and wholly contemptuous manner.

"I'm a peace-loving sort of a fellow, that you know, Mrs. Wren, deploring the reputation our tribe has so justly earned for fighting, and scolding, and jeering at everything and everybody. Indeed they go so far as to say we trust no one, not even our kindred.

But mark me, Mrs. Wren, mark me, I say! Should any rascally Jay, neighbor or not, ever dare approach that tin pot over yonder, or ever alight on the roof of the porch, I'll, I'll—" Mr. Wren fairly snorted in his anger, and standing on one foot, doubled up the toes of the other and struck it defiantly at the imaginary foe.

"Oh, I dare say!" tauntingly said Mrs. Wren, "you are the sort of fellows that I heard little Dorothy reading about the other day. You would fight and run away, Mr. Wren, that you might live to fight another day."

Mr. Wren lifted one foot and scratched himself meditatively behind the ear.

"Good, *very* good, indeed, my dear! It must have been a pretty wise chap that wrote that." And Mr. Wren, who seemed to find the idea very amusing, laughed until the tears stood in his eyes.

Mrs. Wren smoothed her ruffled feathers and smiled too.

"Tut, tut, Jenny," said the good-natured fellow, "what is the use of us newly married folk quarreling in this fashion. Think how joyous we were less than one short hour ago. Come, my dear, the family have all left the porch, save Emmett. Let us fly over there and take a look at our treasure." And Mrs. Wren, entirely restored to good humor, flirted her tail over her back, hopped about a little in a coquetish manner, then spread her wings, and off they flew together.

Mrs. Wren the next day deposited another egg, and the next, and the next, till six little speckled beauties lay huddled together in the cosy nest.

"Exactly the number of our landlord's family," said she, fluffing her feathers and gathering the eggs under her in that truly delightful fashion common to all mother birds. "I am so glad. I was greatly puzzled to know what names we should have given the babies had there been more than six."

"I hadn't thought of that," admitted Mr. Wren, who in his joy had been treating his mate to one of his fine wooing songs, and at length coaxed her from the nest, "but I dare say we would have named them after some of our relatives.

"Why, of course," assented Mrs. Wren, "I certainly would have named one after my dear, brave papa. Mrs. John Wren says that boys named after a great personage generally develop all the qualities of that person."

"Oh, indeed!" sniffed Mr. Wren, "that was the reason she named one of her numerous brood last year after our rascally neighbor, Mr. Jay, I presume. Certainly the youngster turned out as great a rascal as the one he was named after."

Mrs. Wren's head feathers stood on end at once.

"For the life of me," she said tartly, "I cannot see why you always fly into a passion, Mr. Wren, whenever I mention dear papa, or Mrs. John, or in fact *any* of my relatives. Indeed—but sh—sh! There's one of our neighbors coming this way. I verily believe it is, oh yes, it is, it *is*—" and Mrs. Wren wrung her toes, and cried *cheet, cheet, cheet*, and *dee, dee, dee!* in a truly anxious and alarming manner.

[TO BE CONTINUED.]

SUMMARY.

Page 46.

LEAST BITTERN.—*Botaurus exilis*.

RANGE—Temperate North America, from the British Provinces to the West Indies and South America.

NEST—In the thick rushes, along the edge of the water, bending down the tops of water grass and platting it into a snug little nest, about two or three feet above the water.

EGGS—Three or five, pale bluish or greenish-white.

Page 50.

BALDPATE.—*Anas americana*.

RANGE—North America from the Arctic ocean south to Guatemala and Cuba.

NEST—On the ground in marshes, of grass and weeds, neatly arranged and nicely hollowed, usually lined with the down and feathers from its own breast.

EGGS—Eight to twelve, of pale buff.

Page 54.

PURPLE FINCH.—*Carpodacus purpureus*.

Other names: "Purple Grosbeak," "Crimson Finch," "Linnet."

RANGE—Eastern North America, breeding from Northern United States northward.

NEST—In evergreens or orchard trees, at a moderate distance from the ground. Composed of weed-stalks, bark-strips, rootlets, grasses, all kinds of vegetable fibres, and lined with hairs.

EGGS—Four or five, of a dull green, spotted with very dark brown, chiefly about the larger end.

Page 58.

RED-BELLIED WOODPECKER.—*Melanerpes carolinus*. Other name: "Zebra Bird."

RANGE—Eastern United States, west to the Rocky Mountains, south to Florida and Central Texas.

NEST—In holes in decayed trees, twenty or thirty feet from the ground.

EGGS—Four or six, glossy white.

Page 63.

SAW-WHET OWL.—*Nyctale acadica*. Other name: "Acadian Owl."

RANGE—Whole of North America; breeding from middle United States northward.

NEST—In holes, trees, or hollow trunks.

EGGS—Four to seven, white.

Page 67.

BLACK SWAN.—*Cygnus*.

RANGE—Australia.

NEST—On a tussock entirely surrounded by water.

EGGS—Two to five.

Page 71.

SNOWY PLOVER.—*Aegialitis nivosa*.

RANGE—Western North America, south to Mexico in winter, both coasts of Central America, and in western South America to Chili.

NEST—On the ground.

EGGS—Three, ground color, pale buff or clay color, marked with blackish-brown spots, small splashes and fine dots.

Page 75.

LESSER PRAIRIE HEN.—*Tympanuchus pallidicinctus*.

RANGE—Eastern edge of the Great Plains, from western and probably southern Texas northward through Indian Territory to Kansas.

NEST—On the ground in thick prairie grass, and at the foot of bushes on the barren ground; a hollow scratched out in the soil, and sparingly lined with grasses and a few feathers.

EGGS—Eight to twelve, tawny brown.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

MARCH, 1898.

No. 3.

SOME BIRD LOVERS.

THE happiness that is added to human lives by love for the lower creatures is beyond telling. Ernest von Vogelweide, the great German lyric poet of the middle ages, so loved the birds that he left a large bequest to the monks of Wurtzburg on condition that they should feed the birds every day on the tomb-stone over his grave.

Of St. Francis of Assisi's love and tenderness for birds and animals many beautiful stories have been told. The former he particularly loved, and 'tis related they were wont to fly to him, while he talked to, and blessed them. From the hands of a cruel boy he once rescued a pigeon, emblem of innocence and purity, made a nest for it, and watched over it and its young.

Of George Stephenson, the inventor, a beautiful story is told. One day in

an upper room of his home he closed the window. Two or three days afterwards, however, he observed a bird flying against, and violently beating its wings as though trying to break the window. His sympathy and curiosity were aroused. What could the little creature want? The window was opened and the bird flew to one particular spot. Alas! one look into the little nest and the bird with the worm still in its beak which he had brought to the mother and his four little ones, fluttered to the floor. Stephenson lifted the exhausted bird, and tried to revive it. But all his efforts proved in vain. At that time the force of George Stephenson's mind was changing the face of the earth; yet he wept at the sight of the dead family and grieved because he had all unconsciously been the cause of their death.

BIRD DAY.

THE United States Department of Agriculture issued in July, 1896, a circular suggesting that a "Bird Day" be added to the school calendar. In this circular J. Sterling Morton, Secretary of Agriculture, says:

"The cause of bird protection is one that appeals to the best side of our natures. Let us yield to the appeal. Let us have a Bird Day—a day set apart from all the other days of the year to tell the children about the birds. But we must not stop here. We should strive continually to develop and intensify the sentiment of bird protection, not alone for the sake of preserving the birds, but also for the sake of replacing as far as possible the barbaric impulses inherent in child nature by the nobler impulses and aspirations that should characterize advanced civilization."

Prof. C. A. Babcock, superintendent of schools, Oil City, Pa., who has acted upon the suggestion in his schools, says:

"The preservation of the birds is not merely a matter of sentiment, or of education in that high and fine feeling, kindness to all living things. It has an utilitarian side of vast extent, as broad as our boundless fields and our orchards' sweep. The birds are necessary to us. Only by their means can the insects which injure, and if not checked, destroy vegetation, be kept within bounds. . . .

"What is most needed is the knowledge of the birds themselves, their modes of life, their curious ways, and their relation to the scheme of things. To know a bird is to love him. Birds are beautiful and interesting objects of study and make appeals to children that are responded to with delight."

MARCH.

The stormy March has come at last,
With wind and cloud and changing skies,
I hear the rushing of the blast,
That through the snowy valley flies.

Ah, passing few are they who speak,
Wild stormy month! in praise of thee;
Yet, though thy winds are loud and bleak,
Thou art a welcome month to me.

Then sing aloud the gushing rills,
And the full springs, from frost set free,
That, brightly leaping down the hills,
Are just set out to meet the sea.

—BRYANT.

For thou, to northern lands, again
The glad and glorious sun dost bring,
And thou hast joined the gentle train
And wear'st the gentle name of Spring.

And, in thy reign of blast and storm,
Smiles many a long, bright, sunny day,
When the changed winds are soft and warm,
And heaven puts on the blue of May.

THE BIRD'S ANSWER.

"A little bird sat on the twig of a tree,
A-swinging and singing as glad as could be,
And shaking his tail and smoothing his dress,
And having such fun as you never could guess ;
And when he had finished his gay little song,
He flew down the street and went hopping along,
This way and that way with both little feet,
While his sharp little eyes looked for something to eat.

A little boy said to him, 'Little bird, stop
And tell me the reason you go with a hop ;
Why don't you walk as boys do, and men,
One foot at a time, like a duck or a hen ?'
Then the little bird went with a hop, hop, hop,
And laughed as if he never could stop :
And he said, ' Little boy, there are some birds that talk,
And some birds that hop, and some birds that walk,
But most little birds that can sing you a song,
Are so small that their legs are not very strong
To scratch with, or wade with, or catch things, that's why
They hop with both feet, little boy, good-bye.' "

WHERE MISSOURI BIRDS SPEND CHRISTMAS.



Of course we know where the English Sparrow spends his Christmas. And the Snowbird came down in October and is with us yet. Likewise the Bluejay is here in many of our yards, and is quite respectable—like Eugene Field's boy, now that there are no eggs to eat nor young birds to destroy. The Redhead Woodpecker is probably in the deeper woods, though I have not yet seen him this winter. Sometimes he goes south and digs grubs off the tall, dead, southern trees.

But we may be interested in where some of our departed friends are Christmasing.

All our other Woodpeckers stay with us—except the Yellowhammer. He has taken to feeding upon the ground a good deal of late and does not like it frozen.

The Redbreasted Woodpecker and our two little Sapsuckers as we call them, are always here in the winter—the most optimistic birds we have.

I heard the Nuthatch only a few days ago. I did not see him but I knew by the way he talked through his nose that he was hanging head down on some nearby tree. The only other little bird that climbs up tree trunks—except the Woodpeckers—is the Browncreeper, a rather rare bird with us. Some years ago one of the public school teachers sent me one that a little boy had found so chilled that it was helpless; so I suspect that he ought to spend Christmas further south—for his health.

In the woods, the Tree-Sparrow, associating with the Snowbird, occasionally sings us a Christmas Carol—the only bird here now from which we may expect a song, unless some vernal day should loose the syrinx of the Cardinal, or provoke the “*fee-bee*” of the Crested Titmouse.

Christmas is on the vernal side of the winter solstice and any sunny day thereabout is more like spring than autumn.

Sometimes in warm swampy places, the Fox-Sparrow spends the winter about us, but I have never seen any here, though they are on the river about Louisiana, Mo., now, I suspect, along with the Winter-Wren. They both sing occasionally in winter.

On our high backbone position here at Mexico, between the rivers, we are not favorably situated for bird study because the little feathered folks prefer the deep tangles of the river bottoms, and they appreciate the fact that it is naturally warmer there also. Even Robins and Bluebirds sometimes stop in these over winter here in Missouri.

The Doves and Blackbirds are mostly in the southern states, but not far; for, eating grain only now, they are after climate rather than food. But such birds as our swallows and the Flycatchers—say the Peewees, Bee-Martins, and their kind—are much farther on where the insects fly all the year round. Some of them are in Florida and some are in South America and a few perhaps are banqueting in Old Mexico, studying the silver question.—J. N. BASKETT, in *Mexico (Mo.) Intelligencer*.



From col. Chi. Acad. Sciences

BLACK DUCK.
1. Life-size.

Copyright by
Natno. Study Pub. Co., 1908, Chicago.

THE BLACK DUCK.

DUSKY DUCK, Black Mallard, Black English Duck, (Florida), are some of the names by which this well-known member of the family is recognized throughout eastern North America, west to Utah, and north to Labrador. It is much less common in the interior than along the Atlantic coast. It is called the characteristic and one of the commonest Ducks of New England, where it breeds at large, and from thence northeastward, but is most numerous during the migrations.

The nest of the Black Duck is placed on the ground, in grass or rushes in the neighborhood of ponds, pools, and streams, in meadows and sometimes in swamps. It is a large and neatly arranged structure of weeds and grass, hollowed and lined with down and feathers from the breast of the bird. In rare instances it has been known to build its nest in the hollow of a tree, or a "stub" projecting from the water of a swamp. Mr. Frazer found the nest of this Duck in Labrador usually placed upon the out-reaching branches of stunted spruces, which are seldom higher than four feet.

The eggs of this species are from six to twelve in number, usually seven or eight, and vary in color from pale buff to pale greenish buff. The nesting period is from the last of April to the early part of June.

The Black Duck is a very wary creature, exceedingly difficult of approach. They are found in great num-

bers, except when congregated on salt water, five to ten being an average flock started from pond and feeding ground.

During very severe winters, says Hallock, when every sheet of water is bound in with a thick covering of ice, the Black Ducks are driven to warm spring holes where the water never freezes. The approach of evening drives the Ducks from the bay or sound, where they have been sitting during the day, and they seek these open inland spots for food and shelter. Brush-houses are constructed of sedge, cedar boughs, etc., at the mouths of fresh water rivers and creeks, in places where the marsh land is low and intersected by branches of the main stream. Here the Ducks come to feed at night and are taken by hunters who are concealed in the bushes. These houses are left standing, however, and the wary Ducks soon avoid entirely this locality, and feed elsewhere. The brush-house building on feeding grounds cannot be too severely condemned.

Hallock observes that of all the birds which during spring and fall traverse our country probably none equal these Ducks in point of size, numbers and economic value. The group is confined neither to the sea coast, nor to the interior, but is spread out over the whole breadth of the continent, in summer extending its migrations to the furthest north, and in winter proceeding only so far south as it is forced to by the freezing of the waters of its northern home.

THE STORMY PETREL.

"The Stormy Petrel, mamma, is a very interesting bird. I should like very much to be in a ship and see him walking on the water, wouldn't you?"

Mamma, who thought of the apostle St. Peter, shook her head.

"You must be mistaken, Bobbie," said she. "I never heard of a bird that could walk on the water."

"Well, that's what my magazine says," replied Bobbie, "and I am sure BIRDS ought to know. Listen!" and Bobbie, stopping to spell a word now and then, and to ask the meaning of many, managed to inform his mother what the *Stormy Petrel* had to say about himself.

"Though I am the smallest of the web-footed birds I am a great traveler," read Bobbie. "Everywhere over the entire surface of the watery globe you will find members of my order; far north in the Arctic seas and away down in the Southern oceans. We love the sea, and the food which is thrown up by the waves. Anything oily or greasy we particularly like. No matter how stormy the weather, nor how high the billows roll, you will see us little fellows, with outstretched wings,

sweeping along in the hollow trough of the sea. From one side of a ship to the other, now far ahead, then a great way behind, catching up easily with the ship though making ten knots an hour."

"What is a knot, mamma?" queried Bobbie.

"A knot means a sailors' mile. An engineer says his locomotive runs at the rate of so many miles an hour; a seaman says so many 'knots.' A knot is something more than our English mile."

"The sailors call us 'Mother Carey's Chickens.' Because we walk and run on the surface of the water they think us uncanny, foretelling bad weather, or something else bad for the crew, when—let me whisper it into your ear—it is our outstretched wings which uphold us, our wings as well as our broad, flat feet.

There is something else I want to tell you though before I close. Think of making a lamp out of a bird's body! That is what they do with a *Stormy Petrel's* body on a certain island in the Atlantic ocean. They find our carcass so oily from the food we eat, that all they have to do is to draw a wick through our body, light it, and lo they have a lamp.



From col. Chi. Acad. Sciences.

WILSONS PETREL.
2/3 Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

WILSON'S PETREL.

PETRELS are dispersed throughout all the seas and oceans of the world. Wilson's Stormy Petrel is one of the best known and commonest. It is to be met with nearly everywhere over the entire watery surface of the globe—far north in the icy regions of the Arctic seas and south to the sunny isles of southern oceans. It breeds in the months of March, April, May, June, July and August, according to the locality, in the northern latitudes of Europe, eastern and western North America. Dr. J. H. Kidder found it on Kergulen Island, southeast of Africa. He had previously seen the birds at the sea coast off the Cape of Good Hope, and, on December 14, saw them out by day feeding on the oily matter floating away from the carcass of a sea-elephant. The birds, he says, frequent the rocky parts of hillsides, and flitting about like swallows, catch very minute insects. "Mother Carey's Chicken," as it is called by sailors, is widely believed to be the harbinger of bad weather, and many superstitions have grown out of the habit which they possess of apparently walking on the surface of the water as the Apostle St. Peter is recorded to have done. It is the smallest of the web-footed birds, yet few storms are violent enough to keep it from wandering over the waves in search of the food that the disturbed water casts to the surface.

The Stormy Petrel is so exceedingly oily in texture, that the inhabitants of the Feroe islands draw a wick through its body and use it as a lamp.

Wilson gives the following account of its habits while following a ship under sail:

"It is indeed an interesting sight to observe these little birds in a gale, coursing over the waves, down the declivities, up the ascents of the foaming surf that threatens to bend over their head; sweeping along through the hollow troughs of the sea, as in a sheltered valley, and again mounting with the rising billow, and just above its surface, occasionally dropping their feet, which, striking the water, throws the birds up again with additional force; sometimes leaping, with both legs parallel, on the surface of the roughest wave for several yards at a time. Meanwhile they continue coursing from side to side of the ship's wake, making excursions far and wide, to the right and to the left, now a great way ahead, and now shooting astern for several hundred yards, returning again to the ship, as if she were all the time stationary, though perhaps running at the rate of ten knots an hour! But the most singular peculiarity of this bird is its faculty of standing and even running on the surface of the water, which it performs with apparent facility. When any greasy matter is thrown overboard these birds instantly collect around it, and face to windward, with their long wings expanded and their webbed feet patting the water, which the lightness of their bodies and the action of the wind on their wings enable them to do with ease. In calm weather they perform the same maneuver by keeping their wings just so much in action as to prevent their feet from sinking below the surface."

Rev. Mr. Eaton says that this species nests under large rocks not far from the beach. Egg, one, white.

THE STORMY PETREL.

A thousand miles from land are we,
Tossing about on the stormy sea—
 From billow to bounding billow cast,
 Like fleecy snow on the stormy blast.
The sails are scattered abroad like weeds,
The strong masts shake like quivering reeds ;
 The mighty cables and iron chains,
 The hull—which all earthly strength disdains—
They strain and they crack, and hearts like stone
Their natural, hard, proud strength disown.

Up and down!—up and down!
From the base of the wave to the billow's crown,
 And amidst the flashing and feathery foam
 The Stormy Petrel finds a home—
A home, if such a place may be
For her who lives on the wide, wide sea.
 On the craggy ice, in the frozen air,
 And only seeketh her rocky lair
To warn her young and teach them to spring
At once o'er the waves on their stormy wing!

O'er the deep!—o'er the deep !
Where the whale and the shark and the sword fish sleep—
 Out-flying the blast and the driving rain,
 The Petrel telleth her tale—in vain ;
For the mariner curseth the warning bird
Which bringeth him news of the storm unheard !
 Ah ! thus does the prophet of good or ill
 Meet hate from the creatures he serveth still ;
Yet he ne'er falters—so, Petrel, spring
Once more o'er the waves on thy stormy wing!

—BRYAN WALLER PROCTER.



From col. A. W. Carter -

BLUE-GRAY GNATCATCHER.
 $\frac{2}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago

THE BLUE-GRAY GNATCATCHER.

ALMOST everywhere in the United States this active little bird may be found, inhabiting chiefly open, high woods. Often he may be seen along streams, skipping and darting about among the topmost branches of the trees, his long tail elevated and jerking in wren-like fashion, always moving about and ever uttering his wheezy, squeaky notes. Ridgway says that during the breeding season the male has a varied song of considerable power, but lacking in sweetness, and uttered in an erratic manner, portions of it suggesting a weak imitation of the Catbird's medley.

It is as a nest builder that the Gnatcatcher is best known. Davie, whose life study has been nests and eggs, says that as a work of beauty and ingenious architectural design the nest of this bird has few equals in this country. On the whole, it is a rather frail structure, usually built in the small upright twigs or saddled on the horizontal limbs of trees at heights ranging from ten to fifty feet, but generally at an elevation of about fifteen or twenty feet. The typical nest has high, compact walls, contracted at the brim, and gracefully turned; the interior is deeply cupped, and the exterior is beautifully ornamented with lichens. The opening is always at the top. Often the nest

is attached to a limb of the same diameter as itself, thus appearing as a knot or other excrescence. If, as Baskett says, "there can be no doubt that a bird may take delight in the skill of its work and the beauty of its home, as well as in its plumage," the dainty residence of the Blue-gray Gnatcatcher would indicate that the pretty little bird experiences a great amount of pleasure indeed. She lines her nest with soft, downy materials—cotton-like substances of withered blossoms and the silky down of the milkweed—fine, wiry grasses, horse-hair, and an occasional feather from her own breast. In this she lays four or five eggs of greenish or bluish white, speckled with chestnut.

Col. Goss describes this bird as as much at home in the shrubby bushes on the hillsides or mesquite growths on the plains, as within the tree-tops of the heavily timbered bottom lands; a nervous, restless species that, in their quest of insect life, nimbly skip from branch to branch, with partially spread wings and flirting tails, held more or less erect, now and then darting like a flash into the air to catch the passing flies; a tireless picture of bustling energy, that only ceases with the day. The soft, warbling love song is varied, tender, and full of melody, but so low, the hearer must stop to listen in order to fully catch its silvery tones.

THE AMERICAN COOT.

I have a number of names : Mud Hen, Crow Duck, and Blue Peter. It's all the same to me. What's in a name anyway ? Wouldn't a rose smell just as sweet if it were named Blue Peter, too ?

Well I am an aquatic bird, and can quack with the best of them and swim with them, too. I go along beautifully on the water. My feet are very remarkable, the toes being fringed by a membrane which assists me greatly in swimming as well as walking over the ooze. I call them my mud-boards.

Such a lovely little thing as I was when I came out of my shell ! that is what people, who saw me at that time, say. My down was jet-black and my head a bright orange-scarlet mixed with purple and blue. I wish I looked half as handsome now, but you can't paddle around in the mud all day and keep clean. That is I can't. My coat is a sooty-black now and I won't be able to change it as long as I live.

Do you see that bare patch on my forehead ! Well, that accounts for some people's calling me a "Bald-headed Coot." Maybe you will be called that some day, too.

I don't often come to dry land, but when I do I march along very gracefully. I can fly, too, though my wings do appear too short for my size. I just stretch my legs out behind my stumpy tail, spread my wings, and away I go.

I swim easily too, with a peculiar bobbing motion of my head and neck. You should just see a lot of us patter over the water, using our feet as much as our wings, when alarmed. And such a cackling as we do keep up ! Why, you can hear us quite half a mile.

There is one thing about my face I should like to have changed and that is my nose—my bill I mean. It is an ivory-white and no matter how much I stick it in the mud it will stay white. It is a good mark, you see, for a man with a gun, and I am dreadfully afraid I shall be shot some day. I have seen a number of my mates popped over just on account of their white bills.

I visit you in April and leave you in November when the streams freeze over. I hope you will have pleasant weather next month, for I am making preparation to visit you then.



From col. Chi. Acad. Sciences.

AMERICAN COOT.
1/2 Life-size.

Copyright by
Nature Study Pub. Co., 1908, Chicago

THE AMERICAN COOT.

SCIENCE, in its classification and naming of birds, has rendered it quite easy for any one to recognize unmistakably anywhere any specimen we have pictured in our magazine. In some sections this interesting Duck is known as the Mud-hen, in others the Crow Duck, in still others as the Ivory-billed Mud-hen, but with the picture in hand or in mind, one need never call the bird by any other than its correct name, the American Coot. The European Coot resembles it, but its average size is slightly larger, its habits, however, being in all respects like those of its American relative. Davie says that this is the water fowl that the young sportsman persists in shooting as a game bird, but at a riper age he does not "hanker" after its flesh.

The habitat of the Coot is very extensive, covering the whole of North America, middle America, and the West Indies; north to Greenland and Alaska, south to Veragua and Trinidad.

The Coot is a summer resident in large marshes, and is not often rare in any marshy situation. It arrives the last of April and remains until the last of November. It nests at the same time as the Florida Gallinule (see BIRDS, Vol. I, p. 121,) but shows a greater preference for reed patches, in which its nests are usually located, often in from two to four feet of water. The nests are generally larger than those of Gallinules, and rarely composed of other material than the dry stalks of reeds and grasses. They are placed on the ground, just out of the water or on floating vegetation. Some times immense numbers of Coots breed together. The eggs are clay or creamy-white, uniformly and finely dotted all over with specks of dark brown and black. From six to twelve eggs have

been found in a nest. As winter approaches and the marshes and shallow pools become covered with ice, these birds congregate in immense flocks on the rivers and small lakes, and remain until cold weather closes the streams.

Mr. Nelson says the Coot has a curious habit when approached by a boat in a stream, rising often before the boat is within gunshot, and flying directly by the boatman, generally so near that it may be easily brought down. The abundance of Ducks and other game birds has caused the members of this family to be but little molested, until within a few years, when amateur sportsmen, finding Ducks difficult to obtain, and "Mud-hens," as Coots and Gallinules are called, conveniently tame, have turned their batteries upon them and diminished their numbers about many marshes. In the more retired marshes, however, they still breed abundantly. These birds differ from the Gallinules in being social, going in flocks, and in preferring the open water. They sport and rest on muskrat houses and bare places of land and dress their feathers there. During the breeding season they keep near their reedy cover, into which they quickly swim and hide, in case of danger. They swim and walk with a nodding motion of the head. They are not expert divers, but go to the bottom when closely pressed and unable to fly. The flesh of the Coot is dark and not good eating, and its feathers are not soft and downy; it is, therefore, not sought after by the pot hunter, nor considered a game bird by the sportsman, for which reasons, as well as the fact that the feathers cannot be used by the ladies for personal adornment, the birds are not sly and are easily approached.

INTERESTING FACTS ABOUT BIRDS.

SENSES of sight, smell, and hearing are remarkably acute in birds. This is especially true of sight.

Some have three eye lids, the upper and lower and a membrane which can be drawn over the entire eye-ball, called the nictitating membrane, enabling them to look directly at the sun. Eagles, Hawks, and Owls are thus provided. The eyes of the Eagles and Hawks are provided also with a ring of bony plates, by means of which the eye adjusts itself like a telescope, taking in both near and far objects.

Birds, except nocturnal species, have no external ear, but hear well.

The young of nest building birds when born are blind, naked, and unable to walk. In the Hen, the Partridge, and the Ducks, the young are able to walk, swim, or pick up food, as soon as they break the shell. When moulting, at the close of the breeding season, Quails usually shed in pairs. The male generally assumes a duller hued coat than the female.

With most birds of prey the female is the larger.

Bird's songs are composed of love-notes and pleasure-notes. We speak of the scream of birds, their chirp, expressions of joy or fear, as in the human voice. Their songs can be set to music. See

S. P. Cheney's "Wood Notes Wild," in which the songs of many of our common birds are thus reproduced. The odd and peculiar actions of birds, their dances, struts, and posturings are all expressions of their emotions.

The nesting habits of birds are varied. Gulls drop eggs on bare ground or rocks; the Baltimore Oriole and Tailor bird construct hanging nests of elaborate workmanship; the Woodpecker hews out a deep nest in a rotten limb; the Kingfisher digs one out of a sandy bank, while the Cuckoo takes possession of the nest of some other bird. Most birds select nesting places away from other species, but Swallows, English Sparrows, Grackles, and Crows live in communities.

There are between seven and eight thousand species of living birds. A few species have become extinct, specimens of which it is the intention of BIRDS to present in future numbers.

There are three centers of distribution in the United States: (1) the Atlantic states and Mississippi valley; (2) the Rocky Mountain plateau; (3) the Pacific coast.

Most of the birds breeding in the northern portions of the United States migrate south during the winter months. Those remaining are known as residents.

THE IVORY-BILLED WOODPECKER.

IN size, though hardly in beauty, this is indeed the prince of Woodpeckers, the largest of our North American species.

Its length ranges from nineteen to twenty-one inches. There is one other Woodpecker, called the Imperial, which is larger, measuring twenty-three or twenty-four inches in length. This bird is found in Western Mexico, north along the Sierra Madre, and probably, according to Davie, has not yet been observed within the limits of the United States.

The Ivory-billed is now rare, and is apparently restricted to the extreme southern states, especially those bordering the Gulf of Mexico. It is of a wild and wary disposition, making its home in the dark, swampy woodlands. The dense cypress swamps of Florida are one of its favorite haunts.

The nest of the Ivory-bill is excavated in a tree, about forty feet from the ground, the cavity often being nearly two feet in depth. Three or more eggs are laid.

This bird does not remain long in one place, and during the day ranges over an extended territory. Its call is a high, rather nasal, *yap-yap-yap*, sounding in the distance like the note of a penny trumpet.

To use the language of Chapman, whose "Handbook" is a mine of ornithological knowledge, Woodpeckers are rather solitary birds, but are sometimes found associated in scattered companies during their migrations. Above all other birds, they are especially adapted to creep or climb. The peculiar structure of the foot, with its two toes directed forward and two backward, except in one genus, the Three-toed (which will appear in the April number of *BIRDS*), assists them in clinging to an upright

surface, while the pointed, stiffened tail feathers serve as a prop when the bird is resting. The stout, chisel-like bill is used to cut away wood and expose the hiding places of grubs, etc., when the long, distensible tongue, with its horny, spear-like tip is thrust in, the food impaled and drawn out.

All Woodpeckers are of value to the farmer. It has been shown that two-thirds to three-fourths of their food consists of insects, chiefly noxious. Wood-boring beetles, both adults and larvæ, are conspicuous, and with them are associated many caterpillars, mostly species that burrow into trees. Next in importance are the ants that live in decaying wood, all of which are sought by Woodpeckers and eaten in great quantities. Many ants are particularly harmful to timber, for if they find a small spot of decay in the vacant burrow of some wood-borers, they enlarge the hole, and as their colony is always on the increase, continue to eat away the wood until the whole trunk is honeycombed. Moreover, these insects are not accessible to other birds, and could pursue their career of destruction unmolested were it not that the Woodpeckers, with beaks and tongues especially fitted for such work, dig out and devour them. It is thus evident that the Woodpeckers are great conservators of forests. To them, more than to any other agency, we owe the preservation of timber from hordes of destructive insects.

The Ivory-billed Woodpecker, living his almost solitary life in the vast and nearly impenetrable cypress swamps, at a height of forty and fifty feet from the ground, is rarely seen by man. The specimens we present in *BIRDS* are so nearly life-like that our readers need only imagine themselves in the dense forest of cypress to realize a very natural scene.

THE IVORY-BILLED WOODPECKER.

Yap! Yap! Yap!

As I am called the prince of Woodpeckers, I can, I suppose, shout just as loud as I like. Of course my cousin, the Red-bellied Woodpecker, will turn up his bill and say they only call me the prince because I am the largest of all the North American Woodpeckers. Well, I think that is reason enough, don't you? Some creatures who are not birds, have been called princes and kings for less than that—so I have heard.

Mr. Red-belly had a great deal to say about, and for himself, in *BIRDS* last month; he sent his picture, too. Pooh! he can't compare with me. I am said to be the most magnificent Woodpecker of the whole lot. My species is select, too, no matter if he does say the whole family of *Woodpeckers* are common. We are considered rare birds. You don't find us in all localities, no indeed! You will have to travel to the far, far south to catch a glimpse of one of us magnificent fellows. Should you ever go way down on the Suwanee river, and walk "real easy" through the cypress forests you might get a peep at one of us. But we are

wild and shy, and like to travel long distances through the day; no stay-at-home bodies among us.

I'm not one of the three-toed Woodpeckers, either, that *Mr. Red-belly* was so anxious to tell you about. It's very strange how eager some people are to talk about other people's imperfections. I have four toes, two in front and two behind, so it isn't "sour grapes" that leads me to speak as I do. I'll admit my feet are peculiar, my toes assisting me in clinging to an upright surface, and my pointed stiff tail-feathers serving to prop me up when resting.

I think I am very fortunate, too, in having such a stout, chisel-like bill, and such a horny, spear-like tongue. With the first I cut away wood and explore the hiding place of grubs; with the latter I impale them and draw the food out. Dear, dear! How fearfully and wonderfully we are made, to be sure—birds as well as men.

Sing! No, wish I could. But then I have a love-song which my mate thinks is fine; 'tis a long, rolling call, which I beat with my bill.



From col. Chi. Acad. Sciences.

IVORY-BILLED WOODFECKER.

$\frac{1}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE SPARROW HAWK.

Killy-killy-killy-killy!

That's my song and I don't sing it very low either. It is for that reason some people call me the Killy Hawk.

The boys who spend much time in the fields are very well acquainted with me. Many a time, I dare say, they have seen me patiently sitting, for an hour or more, on a lofty branch waiting for "something to turn up."

Something does generally turn up, and that is a mouse. "Ah," says she, peeking out from her nest, "there is nobody around, so I will go out for a walk," and out she comes, not noticing me way up in the tree, of course.

Then I dive from my perch and fly directly over her. A mouse can't keep still, somehow, and from point to point she runs, zigzagging this way and that way, giving me lots of trouble, for I have to zigzag, too. After awhile she stands still for a minute, and so do I, up in the

air, my fan-like tail spread out very wide, my head lowered and—well, pretty soon it is all over with Mrs. Mouse. But mice are nuisances anyway, don't you think? Just because people have seen me do that little trick they call me the Mouse Hawk. I catch Sparrows, and other small birds, so they call me the Sparrow Hawk, too.

I don't care what they call me, to tell you the truth, just so they let me alone. It's not pleasant to have a stone thrown at you, or a gun pointed your way—if it is loaded, and they generally are loaded, I notice, with something that hurts.

My nest? Oh, I don't care for that sort of work, so I never build one. Any natural hole in a high tree, the deserted hole of a Woodpecker, or a Magpie's nest, is good enough for me. Just a few leaves in the bottom, and on them my mate lays five eggs, sometimes six, sometimes seven.

THE AMERICAN SPARROW HAWK.

EVERY boy who has been in the fields is familiar with this beautiful little Hawk, which is numerous everywhere in North America. As Davie felicitously says: "Here it may be seen hovering almost motionless in mid air, then suddenly swooping down to the ground, arises again with perhaps a field-mouse in its talons." From this habit it receives the name of Mouse Hawk, although it also preys upon Sparrows and other small birds. It is found almost everywhere, though most abundant along streams where grow the high sycamores, whose natural cavities furnish suitable nesting places, but meadows and fields are its retreats when in search of food. It builds no nest, but deposits its eggs in the natural cavities of high trees, often in the deserted holes of Woodpeckers, or in crevices in rocks or nooks about buildings. In the West it frequently appropriates a deserted Magpie's nest. Eggs of this Hawk were taken from a crevice in a stone quarry in the Scioto river, where the birds nested for years. The Sparrow Hawk often takes possession of boxes intended for Pigeons, and it always proves to be a peaceable neighbor. The nests generally contain no lining, but in some cases a slight bed of leaves or grasses on a few chips are used. The eggs

are four to six, buffy white, speckled, spotted, and blotched with light and dark brown.

This Hawk is not as active or destructive as others of the Falcon tribe. Its flight is usually short and irregular, darting here and there, often hovering in a suspended manner for several moments at a time. During the summer months, it occasionally kills small birds, but feeds chiefly upon mice, lizards, grasshoppers, crickets, and the like, as they are so much easier to capture than full grown birds, and to which they rarely turn their attention, until the cold weather drives the other forms of life, upon which they so largely feed, into their winter beds. The bird that suffers most outside of the Horned Larks and Longspurs, is the Tree Sparrow, as it prefers the hedges and small thickets upon the prairies, instead of the wooded lands, for its sheltered home; its food in all such cases being upon the open lands, and whenever there is snow upon the ground it drifts against the hedges and forces the little birds to seek the bare spots, quite a distance away, for the seeds on or fallen from the weeds. Here it is that the Hawk, says Goss, successfully performs its work, by darting from a perch and striking the Sparrow, either upon the ground or before it can reach its hiding place.

The woods are full of voices everywhere;
An hundred chipmunks' sharp, quick tones are there;
The cricket's chirp, the partridge drum,
The harsh-voiced crows which go and come,
In Nature's song agree.
The breeze that wanders through the firs,
The rustle of each leaf that stirs,
Are whisperings to me.
So, when swift impulse leads in ways unknown,
I follow on without a thought of fear;
God reigns, and I can never be alone,
With Nature near.

—TOM CARDER, JR.



From col. F. M. Woodruff.

AMERICAN SPARROW HAWK.
2. Life size.

Copyright by
Nature Study Pub. Co., 1908, Chicago.

HINTS ON THE STUDY OF WINTER BIRDS.

IN attractiveness to children, says James E. McDade, for the Committee of Sixty of Chicago, no department of natural history surpasses Ornithology. Birds are to be found everywhere. In the city parks and suburban groves careful observation will reveal objects of study, even in the depths of winter. The following suggestions are based on practical work which has been done in the G. W. Curtis school during the past two years.

No satisfactory work can be done until the children have been aroused to sufficient interest to observe birds for themselves. Pictures and descriptions, however valuable as auxiliaries, can never take the place of personal observation. The best method of arousing this interest is to go out with the children and study the birds. Opera glasses or field glasses will greatly facilitate observation.

As a guide in description pupils may have in mind the following points: shape and size of bird; prevailing color; marks on head, wings, throat, or tail; shape of bill; length of tail; where found (whether on the ground, in trees, or climbing tree trunks). These and other details should be emphasized.

In all this work strict accuracy must be insisted on. In the beginning, pupils are apt to give inaccurate, and, in some instances, highly imaginary descriptions of birds. A good plan is to encourage them to bring in written descriptions of birds they have seen.

Such field work may well furnish excellent subject matter for water color

work, as well as a basis for written compositions. Good collections of our native birds may be found in the Field Columbian Museum and in the museum of the Chicago Academy of Sciences, and the curators of these institutions will be found ready to give teachers any aid in their power.

Mr. McDade mentions the following as the most common winter birds of this vicinity, not including swimmers and waders: the English Sparrow, the Snow Bird, the Bluejay, the Thistlebird, the Black-capped Chickadee, the White-bellied Nuthatch, the Northern Shrike or Butcherbird, the Horned Lark, and the Crow.

In many parts of the country there are good collections of birds which are accessible, and which may, by a little inquiry, be found by those interested. We do not hesitate to say, however, that the specimens of birds shown monthly in this magazine have stimulated the successful study of Ornithology to a degree never imagined as possible. The pictures are so true to nature in color and attitude that they are instantly fixed in the mind. We know several instances where children of eight and ten years have become by its use so familiar with many birds that they can draw and paint them from memory with considerable fidelity. BIRDS is indeed the best means of acquiring speedy as well as accurate knowledge of Ornithology desired by those who do not expect to pursue the study in all its scientific ramifications. We refer with confidence to the recognized authorities on the subject.

C. C. MARBLE.

THE SILVER PHEASANT.

The Feasant Cocke the woods doth most frequent,
Where Spaniels spring and perche him by the sent.

—OLD RHYME.

IN beautiful contrast with the Golden Pheasant (see BIRDS, Vol. I, p. 13) we present this month the magnificent Silver or Penciled Pheasant, also a native of China, which has long been introduced into Europe, but has been considered to be fitted only for the aviary. The Pheasant was long thought to have been brought from the banks of the river Phasis, now the Rioni, in Colchis, and introduced into Europe by the Argonauts. Newton says that, as a matter of fact, nothing is known on this point; and, judging from the recognition of the remains of several species referred to, both in Greece and in France, it seems not impossible that the ordinary Pheasant may have been indigenous to England.

It was thought only a few years ago that the successful propagation of Pheasants was problematical, but now the Mongolian, the English Ring-necked, and the Chinese Golden Pheasant, each has found a home in some of the states, where it is increasing in numbers. Why may not a similar experiment be made with the Silver Pheasant?

On Fox Island, in Puget Sound, there is an oriental Pheasant preserve. Mr. Frank Alling, the proprietor, is securing the co-operation of other land owners, and it promises to be a great success. The varieties of Pheasants which he is raising include all we have mentioned in this article, as well as the Copper, the Green, the Bronze, and the Asiatic Ring-necks, with a curiosity in the shape of a mule produced by crossing and recrossing the Copper

and Asiatic Ring-necks. The mule hens are very beautiful, but their eggs will not hatch. Oriental Quails liberated on the island have increased quite rapidly. Among the many importations are small Bantams from Woo Sung, China, for hatching Pheasant eggs and rearing the young birds; Mandarin Ducks, from Japan, (see BIRDS, Vol. I, p. 9); Wild Peacocks and Bleeding Heart Pigeons, from Calcutta, India, and Manila, respectively.

In England within recent years the practice of bringing up Pheasants by hand has been extensively followed, and the numbers so reared, says Newton, vastly exceed those that are bred at large. The eggs are collected from birds that are either running wild or kept in a mew, and are placed under domestic hens; but, though these prove most attentive foster-mothers, much additional care on the part of the keepers is needed to insure the arrival at maturity of the chicks; for, being necessarily crowded in a comparatively small space, they are subject to several diseases which often carry off a large proportion, to say nothing of the risk they run of not being provided with proper food or of meeting an early death from some predatory animal. As they advance in age the young Pheasants readily take to a wild life, and indeed can only be kept from wandering in every direction by being plentifully supplied with food, which has to be scattered for them in the places in which it is desired that they should stay.



From col. Chi. Acad. Sciences.

SILVER PHEASANT.
 $\frac{1}{4}$ Life-size.

Copyright by
Nature Study Publ. Co., 1895, Chicago.

EIDER DUCK FARMS.

The Fluffy Feathers Gathered in Iceland.

ALL ACCOUNTS I have read about Eider Ducks say that nests are robbed of their down twice, the duck supplying it each time from her own body; the third time the drake gives his white down, and this is allowed to remain, declares a writer in *Good Words*. But I was told by farmers in Iceland that now they never take the down until the little ones are hatched. It has been found that the birds thrive better and increase faster when they are allowed to live as nature meant them to. So now the poor mothers are no longer obliged to strip themselves of all their down to refurnish their despoiled nests. Sometimes, if the quantity is very great, a little may be taken, but enough must be left to cover the eggs when the duck leaves her nest for food.

A writer from Iceland, in speaking of a visit to one of the Isafjord farms, wrote: "On the coast was a wall built of large stones, just above high water level, about three feet high and of considerable thickness at the bottom. On both sides of it alternate stones had been left out so as to form a series of square compartments for the ducks to make their nests in. Almost every compartment was occupied, and as we walked along the

shore a line of ducks flew out, one after another. The house was a marvel; the earthen walls that surround it and the window embrasures were occupied with ducks. On the ground the house was fringed with ducks. On the turf slopes of the roof we could see ducks, and ducks sat on the scraper."

About 10,000 pounds of eiderdown are gathered annually in Iceland, 7,000 being exported to foreign countries. Formerly the peasants used to receive over 21 shillings a pound, but the price has now fallen to half that amount. The peasants seldom receive money, and are obliged to barter their down for merchandise furnished by the Danish merchants at the little settlements at the fjords. A pound and a half of down is enough to fill an ordinary bed-puff. These very comfortable articles are found in the guest room of every Iceland farm, however poor and small it may be. After a long, hard day in the saddle the traveler longs for warmth and shelter. These little guest rooms have never had a fire in them, and built, as they are, on the ground, there is a dreadful chill on them. Once tucked away in bed, and tired bones lose their pains and stiffness, however, and well covered with the down-puff, a delightful sense of comfort follows.

THE SCALED PARTRIDGE.

THROUGHOUT Northwestern Mexico and the border of the United States, from Western Texas to New Mexico and Southern Arizona, this handsome Partridge, called the Blue Quail, is found in abundance, especially on the dry mesas of the San Pedro slope of the Santa Catalina Mountains, up to an altitude of three thousand five hundred feet. In Arizona they are found in flocks of from six to ten, sometimes more, in the most barren places, miles away from water.

The Blue Quail, like all the other western and southwestern species, prefers to trust to safety to its powers

of running, rather than those of flight. The great trouble is to start them from the ground.

A slight depression under a bush serves for the nest of this bird, which is generally lined with a few coarse grasses. Complete sets of eggs have been found as early as April 25. The eggs are extremely thick-shelled, of a buffy-white or cream color. The number laid ranges from eight to sixteen.

The habits of this Quail do not differ greatly from those of Bob White, though they have not been fully studied, and the species is of less extensive distribution.

THE MOUND BIRD.

There are some peculiar birds in the world, and one of the strangest is the Australian Megapod, or Mound bird, that allows nature to perform the labor of hatching its eggs. In some parts of the island continent are found many mounds of considerable size and height, which the first explorers took for burial mounds. These were made by the "Megapodius Tumulus," which uses them for hatching its eggs. They have sometimes considerable dimensions. A nest that is 14 feet high and 55 feet in circumference may be regarded as large. Each Megapod builds its own nest with materials which it gathers from all sides, and these are exactly what the gardener uses in the month of March to make his forcing beds—namely, leaves and decomposing vegetable matter, which by their fermentation give off an appreciable amount of heat. In the forcing beds this heat hastens the sprouting of the seeds; in

the nest it suffices for the development and hatching of the young birds, and the mother can go where she likes and occupy herself as she wishes without being troubled by the duties of sitting. In the small islands of Ninafou, in the Pacific, another bird has a somewhat similar habit, in so far as it also abandons its eggs, but in place of obtaining the necessary heat from fermentation it gets it from the warm sand. The Leipoa or native Pheasant of Australia acts like the Megapod and watches the temperature of its mound very closely, covering and uncovering the eggs several times a day to cool them or heat them, as becomes necessary. After hatching, the young bird remains in the mound several hours; it leaves on the second day, but returns for the night, and not until the third day is it able to leave for good the paternal abode.—*American Field.*



From col. Ch. Acad. Sciences.

CHICAGO COLORTYPE CO., CHIC. & NEW YORK

SCALED PARTRIDGE.
4 10 Life-size.

Copyright
by
Nature Study Pub. Co., 1908, Chicago.

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

Mr. Wren had no need to inquire the cause of his mate's distress, for at this moment a loud and vehement *Jay-jay-jay*, resounded from an adjacent tree.

"Ha!" said he, "it is that villian Mr. Blue Jay at last. I have been expecting a call from him for some time. I heard yesterday that he was caught sucking the eggs of Mrs. Red-eyed Vireo, and that Mrs. Dove was mourning more than usual because out of four beautiful eggs she had only one left. But never you mind, my dear, never you mind! He daren't go near our nest you see, for Bridget is out there with her broom, and if he should dare attack us, why——"

"Well!" chirped Mrs. Wren, who at once saw the force of his reasoning, "what would you do, Mr. Wren, should he attack us? I'd like to know because I am quite sure what dear papa would have done under the circumstances."

"So am I," responded Mr. Wren with a chuckle, "so am I."

"So are you—what?" retorted Mrs. Wren, angrily tapping the perch on which she sat with her foot.

"Sure what your dear papa would have done, my dear, under the circumstances. Ha, ha, ha!" and Mr. Wren flirted his tail over his head and hopped about in anything but a dignified or warrior-like manner.

Mrs. Wren surveyed him with contempt and surprise.

"Of all the ex-as-per-at-ing creatures," she said, "you are the worst. First you whispered and bid me be silent, and now just look at you hopping about and jibbering like an idiot! I wish Mr. Blue Jay *would* come over here and——"

"Come over here?" Mr. Wren almost turned a somersault in his glee. "Come over here, my dear! Not much! Don't you see that King-bird over there with his eye on Mr. Jay! There's going to be a fight, a real knock-down, feather-pulling fight, and I—*I won't be in it!*" and Mr. Wren whistled and chattered and flirted his tail in a greatly relieved and truly funny manner.

"If I wasn't so anxious about the eggs," said Mrs. Wren, "I'd stay here and see the fight, too. They are well matched, both such fine, handsome birds—especially Mr. Jay. Ah, how it does all remind me of dear papa."

Mr. Wren could have laughed aloud when he thought of her plain, crooked-legged little father, but he only sniffed and said something about Mr. Jay being a saucy, impudent dude.

"But really, now, he is handsome," repeated Mrs. Wren, "only see how his head feathers stand up! My, how angry they both are. What can be the matter, I wonder?"

"If you will stop talking for a minute," returned Mr. Wren, "perhaps we can hear. Mr. Blue Jay is a

great coward when it comes to fighting one of his size. More than likely he will sneak away, or fly off screaming loudly at the first signs of attack."

"If you will stop your chatter," sharply retorted Mrs. Wren, "we may hear what they are saying. Listen, can't you?"

"You old thief and pickpocket," shrieked Mr. Kingbird, his head feathers standing up like an Indian chief's, "whose nest around here are you lying in wait to rob?"

"What business is it of yours?" retorted Mr. Jay with a sneer. "You old tyrant! A nice fellow, indeed, to be calling people names. The pot calling the kettle black. Humph!"

Mr. Kingbird, aware of the many young birds he had eaten in his time concluded he had best confine himself exclusively to the question of eggs.

"It's only a sneak," he replied, "that will creep up when the mother bird is off her nest and suck the eggs. Nobody but a coward would do it. The Mourning Dove's cries the other day were truly heartrending. I made up my mind then that the very first time you crossed my path I would thrash you."

"That's right, give it to him, give it to him!" cried the birds in chorus, a large number of which, attracted by the quarrel, had formed themselves into a ring about the tree tops. "He's not only a thief but a bully, always ready to whip a bird under his size."

Mr. Blue Jay winced for a second, for it is not pleasant to find one's self hated by all his fellow kind.

"I'll swear," said he, lifting up one foot solemnly, "that I have not been near the Mourning Dove's nest this season."

"Nor the Red-eyed Vireo's?"

"Nor the Red-eyed Vireo's," affirmed Mr. Blue Jay, slightly closing one eye, and coughing behind his foot.

"Oh, oh, oh!" chorused a dozen voices, "we saw him around there this very morning."

"And I," said a Bluebird, "saw him destroy the eggs in Mrs. Mourning Dove's nest, myself."

"So," sternly said Mr. Kingbird, "the rascal adds perjury to his other crimes. It is the duty of every honest citizen of the woods and orchards to rid the world of such a villain. Defend yourself, Mr. Jay, or——"

At this moment a loud and vehement *Zeay, ze-a-y*," broke in upon Mr. Kingbird's speech.

"Ah! Mr. Catbird," said he, his crest suddenly falling, "I think, I—will attend to this case another time," and much to the disappointment of the assembled crowd Mr. Kingbird took wing and flew away.

No sooner was he gone than Mr. Blue Jay nearly doubled himself up with laughter.

"I thought that would make his feathers fall," he said, resuming his braggart manner. "I have noticed how quickly he gets out of the way of Mr. Catbird, though he will fight a Hawk, or a Crow, or even an Eagle. He! he! he! I imitated Mr. Catbird very well, didn't I?" and the rogue, to show his powers of mimicry, cried *Zeay, ze-a-y*, again, then *Caw, caw*, like a Crow,

meowed like a cat, barked like a dog, crowed like a Rooster, and finished with a loud, harsh *Kee-oo, kee-oo*, which put all the birds to flight.

"The Red-shouldered Hawk," they one and all cried with frightened glances into the air, and Mrs. Wren, forgetting for the moment that it was only Mr. Jay imitating Mr. Hawk, flew over to her nest in the greatest consternation.

"Well, well," she said afterward with a laugh, "it was 'much ado about nothing' after all. But what a clever fellow that Mr. Jay is to be sure! Really I cannot help but admire him, rogue though he is," and with a pretty flutter of her wings Mrs. Wren gathered the six speckled treasures under her breast and sat down to brood.

"I don't see how you could have covered more than six eggs, my dear," said Mr. Wren tenderly. "You are such a little body, you know. Mrs. John last year, though, had ten in one brood, did she not?"

"Yes," sniffed Mrs. Wren, "and her neighbors have never heard the last of it. Such a gossip and braggart as she is. Why, she tells every lady bird that calls on her that her Mr. Wren had three furnished houses when he proposed to her; one in a knot-hole of an apple tree, one on top of a *very* high pole, and the other—well, really I forget; under the roof of a meeting house, I believe.

"Hm!" said Mr. Wren, turning up his bill, "that's the reason she accepted

him, I suppose. To my notion he is a most unattractive fellow, ugly as he is proud."

"Oh, handsome is as handsome does," returned Mrs. Wren, "as our landlady says. But you can't deny that he makes my cousin a good husband. It is very foolish for them to boast so, for they can only occupy one house at a time, and surely they have to earn their food by searching for insects and worms, precisely as we do. Then, too, riches take wings sometimes, and fly away, and as I told one of my neighbors the other day, I am just as happy in this old tin pot as I would be on top of the highest pole."

"How glad I am to hear you say that," returned Mr. Wren, tears glistening in his little black eyes, "for there can be no true happiness without contentment—as our landlord says. Dear little mate! Fourteen days you must sit on the nest. How tired you will be!"

"Oh, I don't mind that," replied Mrs. Wren, "if only our birdlings hatch out pretty and good. Once in a while I will fly off for a little exercise, you know, and, like Mr. John, you will take my place on the nest and keep the eggs warm."

"Oh!" exclaimed Mr. Wren, ruefully; "I hadn't calculated on doing that. But we will see. I'm off, now, to get something to eat, and will fetch you as delicious a spider or nice fat canker worm as I can find. Ta, ta, love!" and off Mr. Wren flew to the orchard, singing as he went.

SUMMARY.

Page 86.

BLACK DUCK.—*Anas obscura*. Other name: "Dusky Duck."

RANGE—North America; breeds from Illinois and New Jersey to Hudson Bay and Labrador; winters southward to the Greater Antilles.

NEST—On the ground, in grass or rushes in the neighborhood of ponds, pools, and streams.

EGGS—Eight to twelve, pale greenish or bluish white, or creamy buff.

Page 90.

WILSON'S PETREL.—*Oceanites oceanicus*.

RANGE—Atlantic Ocean; breeds in southern seas (Kerguelen Island) and migrates northward, spending the summer off our coasts.

NEST—In the crevices of rocks.

EGG—One, white.

Page 94.

BLUE-GRAY GNATCATCHER.—*Poliophtila caerulea*.

RANGE—Eastern United States; breeds from the Gulf States to northern Illinois, southern Ontario and New Jersey, and wanders rarely to Minnesota and Maine; winters from Florida southward.

NEST—Of fine strips of bark and fine grasses firmly interwoven and covered with lichens, on branch or in crotch of tree, ten to sixty feet up.

EGGS—Four or five, bluish white, thickly spotted and speckled with brown.

Page 98.

AMERICAN COOT.—*Fulica Americana*. Other names: "Mud-hen," "Crow Duck," "Blue Peter."

RANGE—North America as far north as Alaska and New Brunswick and Greenland; breeds throughout its range.

NEST—Of reeds and grasses, among reeds in fresh water marshes.

EGGS—Eight to fifteen, pale, buffy white, speckled with chocolate on black.

Page 102.

IVORY-BILLED WOODPECKER.—*Campephilus principalis*.

RANGE—Formerly South Atlantic and Gulf States, from North Carolina to Texas; north in the Mississippi valley to Missouri, southern Illinois, and southern Indiana. Now restricted to the Gulf States and the lower Mississippi Valley, where only locally distributed. (A.O.U.)

NEST—In the higher part of a tree.

EGGS—Three have been found.

Page 107.

AMERICAN SPARROW HAWK.—*Falco sparverius*. Other name: "Killy Hawk."

RANGE—From Florida to Hudson Bay, and winters from New Jersey southward.

NEST—In a hole in a tree, frequently in a Woodpecker's deserted nest.

EGGS—Three to seven, creamy white to rufous, generally finely and evenly marked with shades of the ground color.

Page 111.

SILVER PHEASANT.—*Phasianus nycthemerus*. Other name: "Penciled."

RANGE—Throughout China.

Page 115.

SCALED PARTRIDGE.—*Callipepla squamata*. Other name: "Blue Quail."

RANGE—Northwestern Mexico and border of the United States, from western Texas to New Mexico and southern Arizona.

NEST—A slight depression under a bush, lined with a few coarse grasses.

EGGS—Eight to sixteen, of a buffy-white or cream color, irregularly dotted with specks of light brown.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

APRIL, 1898.

No. 4.

AVIARIES.

AN admirer of birds recently said to us: "Much is said of the brilliant specimens which you have presented in your magazine, but I confess that they have not been the most attractive to me. Many birds of no special beauty of plumage seem to me far more interesting than those which have little more than bright colors and a pretty song to recommend them to the observer." He did not particularize, but a little reflection will readily account for the justness of his opinion. Many plain birds have characteristics which indicate considerable intelligence, and may be watched and studied with continued and increasing interest. To get sufficiently near to them in their native haunts for this purpose is seldom practicable, hence the limited knowledge of individual naturalists, who are often mere generalizers, and the necessity of the accumulated knowledge of many patient students. In an aviary of sufficient size, in which there is little or no interference with the natural habits of the birds, a vast number of interesting facts may be obtained, and the birds themselves suffer no harm, but are rather protected from it. Such an aviary is that of Mr. J. W. Sefton, of San Diego, California. In a recent letter Mrs. Sefton pleasantly writes of it for the benefit of readers of *BIRDS*. She says:

"My aviary is out in the grounds of our home. It is built almost entirely of wire, protected only on the north and west by an open shed, under which the birds sleep, build their nests and gather during the rains which we

occasionally have throughout the winter months. The building is forty feet long, twenty feet wide, and at the center of the arch is seventeen feet high. Running water trickles over rocks, affording the birds the opportunity of bathing as they desire. There are forty-seven varieties of birds and about four hundred specimens. The varieties include a great many whose pictures have appeared in *BIRDS*: Quail, Partridge, Doves, Skylarks, Starlings, Bobolinks, Robins, Blackbirds, Buntings, Grosbeaks, Blue Mountain Lory, Cockateel, Rosellas, Grass Parrakeet, Java Sparrows, Canaries, Nonpariels, Nightingales, Cardinals of North and South America, and a large number of rare foreign Finches, indeed nearly every country of the world has a representative in the aviary.

"We have hollow trees in which the birds of the Parrot family set up housekeeping. They lay their eggs on the bottom of the hole, make no pretention of building a nest, and sit three weeks. The young birds are nearly as large as the parents, and are fully feathered and colored when they crawl out of the home nest. We have been very successful, raising two broods of Cockateel and one of Rosellas last season. They lay from four to six round white eggs. We have a number of Bob White and California Quail. Last season one pair of Bob Whites decided to go to housekeeping in some brush in a corner, and the hen laid twenty-three eggs, while another pair made their nest in the opposite corner and the hen laid nine eggs. After sitting two weeks the hen with the nine eggs abandoned her nest. when the male

took her place upon the eggs, only leaving them for food and water, and finally brought out six babies, two days after the other hen hatched twenty-three little ones. For six days the six followed the lone cock around the aviary, when three of them left him and went over to the others. A few days later another little fellow abandoned him and took up with a California Quail hen. The next day the poor fellow was alone, every chick having deserted him. The last little one remained with his adopted mother over two weeks, but at last he too went with the crowd. These birds seemed just as happy as though they were unconfined to the limits of an aviary.

"We have had this aviary over two years and have raised a large number of birds. All are healthy and happy, although they are out in the open both day and night all the year round. Many persons, observant of the happiness and security of our family of birds, have brought us their pets for safe-keeping, being unwilling, after seeing the freedom which our birds enjoy, to keep them longer confined in small cages.

"Around the fountain are calla lillies, flags, and other growing plants, small trees are scattered about, and the merry whistles and sweet songs testify to the perfect contentment of this happy family."

Yes, these birds are happy in *such* confinement. They are actually deprived of nothing but the opportunity to migrate. They have abundance of food, are protected from predatory animals, Hawks, conscienceless hunters, small boys, and nature herself, who destroys more of them than all other instrumentalities combined. Under the snow lie the bodies of hundreds of frozen birds whenever the winter has seemed unkind. A walk in the park, just after the thaw in early March, revealed to us the remorselessness of winter. They have no defense against the icy blast of a

severe season. And yet, how many escape its ruthlessness. On the first day of March we saw a white-breasted Sparrow standing on the crust of snow by the roadside. When we came up close to it it flew a few yards and alighted. As we again approached, thinking to catch it, and extending our hand for the purpose, it flew farther away, on apparently feeble wing. It was in need of food. The whole earth seemed covered with snow, and where food might be found was the problem the poor Sparrow was no doubt considering.

Yes, the birds are happy when nature is bountiful. And they are none the less happy when man provides for them with humane tenderness. For two years we devoted a large room—which we never thought of calling an aviary—to the exclusive use of a beautiful pair of Hartz mountain Canaries. In that short time they increased to the number of more than three dozen. All were healthy; many of them sang with ecstasy, especially when the sun shone brightly; in the warmth of the sun they would lie with wings raised and seem to fairly revel in it; they would bathe once every day, sometimes twice, and, like the English Sparrows and the barnyard fowl, they would wallow in dry sand provided for them; they would recognize a call note and become attentive to its meaning, take a seed from the hand or the lips, derive infinite pleasure from any vegetable food of which they had long been deprived; if a Sparrow Hawk, which they seemed to see instantly, appeared at a great height they hastily took refuge in the darkest corner of the room, venturing to the windows only after all danger seemed past; at the first glimmering of dawn they twittered, preened, and sang a prodigious welcome to the morn, and as the evening shades began to appear they became as silent as midnight and put their little heads away under their delicate yellow wings.

CHARLES C. MARBLE.

FOREIGN SONG BIRDS IN OREGON.

IN 1889 and 1892 the German Song Bird Society of Oregon introduced there 400 pairs of the following species of German song birds, to-wit: Song Thrushes, Black Thrushes, Skylarks, Woodlarks, Goldfinches, Chaffinches, Ziskins, Greenfinches, Bullfinches, Grossbeaks, Black Starlings, Robin Redbreasts, Linnets, Singing Quails, Goldhammers, Linnets, Forest Finches, and the plain and black headed Nightingales. The funds for defraying the cost of importation and other incidental expenses, and for the keeping of the birds through the winter, were subscribed by the citizens of Portland and other localities in Oregon. To import the first lot cost about \$1,400. After the birds were received they were placed on exhibition at the Exposition building for some days, and about \$400 was realized, which was applied toward the expense. Subsequently all the birds, with the exception of the Sky and Wood Larks, were liberated near the City Park. The latter birds were turned loose about the fields in the Willamette Valley.

When the second invoice of birds arrived it was late in the season, and Mr. Frank Dekum caused a very large aviary to be built near his residence where all the sweet little strangers were safely housed and cared for during the winter. The birds were all liberated early in April. Up to that time (Spring of 1893) the total cost of

importing the birds amounted to \$2,100.

Since these birds were given their liberty the most encouraging results have followed. It is generally believed that the two varieties of Nightingales have become extinct, as few survived the long trip and none have since been seen. All the other varieties have multiplied with great rapidity. This is true especially of the Skylarks. These birds rear from two to four broods every season. Hundreds of them are seen in the fields and meadows in and about East Portland, and their sweet songs are a source of delight to every one. About Rooster Rock, twenty-five miles east of Portland on the Columbia, great numbers are to be seen. In fact the whole Willamette Valley from Portland to Roseburg is full of them, probably not as plentiful as the Ring-neck Pheasant but plentiful enough for all practical purposes. In and about the city these sweet little songsters are in considerable abundance. A number of the Black Starling make their homes about the high school building. The Woodlarks are also in evidence to a pleasing extent.

There is a special State law in force for the protection of these imported birds. They are all friends of the farmer, especially of the orchardists. They are the tireless and unremitting enemy of every species of bug and worm infesting vegetables, crops, fruit, etc.—S. H. GREENE, in *Forest and Stream*

BIRD SONGS OF MEMORY.

Oh, surpassing all expression by the rhythmic use of words,
Are the memories that gather of the singing of the birds;
When as a child I listened to the Whipporwill at dark,
And with the dawn awakened to the music of the lark.

Then what a chorus wonderful when morning had begun!
The very leaves it seemed to me were singing to the sun,
And calling on the world asleep to waken and behold
The king in glory coming forth along his path of gold.

The crimson-fronted Linnet sang above the river's edge;
The Finches from the evergreens, the Thrushes in the hedge;
Each one as if a dozen songs were chorused in his own,
And all the world were listening to him and him alone.

In gladness sang the Bobolink upon ascending wing,
With cheering voice the bird of blue, the pioneer of spring;
The Oriole upon the elm with martial note and clear,
While Martins twittered gaily by the cottage window near.

Among the orchard trees were heard the Robin and the Wren,
And the army of the Blackbirds along the marshy fen;
The songsters in the meadow, and the Quail upon the wheat,
And the Warbler's minor music, made the symphony complete.

Beyond the towering chimneyd walls that daily meet my eyes
I hold a vision beautiful, beneath the summer skies;
Within the city's grim confines, above the roaring street,
The *happy birds of memory* are singing clear and sweet.

—GARRETT NEWKIRK.



From col. Chi. Acad. Sciences.

OVEN BIRD.
4/5 Life-size.

Copyright by
Nature study Pub. Co., 1898, Chicago.

THE OVENBIRD.

ROW and then an observer has the somewhat rare pleasure of seeing this Warbler (a trifle smaller than the English Sparrow) as he scratches away, fowl fashion, for his food. He has more than one name, and is generally known as the Golden-crowned Thrush, which name, it seems to us, is an appropriate one, for by any one acquainted with the Thrush family he would at once be recognized as of the genus. He has still other names, as the Teacher, Wood Wagtail, and Golden-crowned Accentor.

This warbler is found nearly all over the United States, hence all the American readers of *BIRDS* should be able to make its personal acquaintance.

Mr. Ridgway, in "*Birds of Illinois*," a book which should be especially valued by the citizens of that state, has given so delightful an account of the habits of the Golden-crown, that we may be forgiven for using a part of it. He declares that it is one of the most generally distributed and numerous birds of eastern North America, that it is almost certain to be found in any piece of woodland, if not too wet, and its frequently repeated song, which, in his opinion, is not musical, or otherwise particularly attractive, but very sharp, clear, and emphatic, is often, especially during noonday in midsummer, the only bird note to be heard.

You will generally see the Ovenbird upon the ground walking gracefully over the dead leaves, or upon an old log, making occasional halts, during which its body is tilted daintily up and down. Its ordinary note, a rather faint but sharp *chip*, is prolonged into a chatter when one is chased by another. The usual song is very clear and

penetrating, but not musical, and is well expressed by Burroughs as sounding like the words *Teacher, teacher, teacher, teacher, teacher!* the accent on the first syllable, and each word uttered with increased force. Mr. Burroughs adds, however, that it has a far rarer song, which it reserves for some nymph whom it meets in the air. Mounting by easy flights to the top of the tallest tree, it launches into the air with a sort of suspended, hovering flight, and bursts into a perfect ecstasy of song, rivaling the Gold Finch's in vivacity and the Linnet's in melody. Thus do observers differ. To many, no doubt, it is one of the least disagreeable of noises. Col. Goss is a very enthusiastic admirer of the song of this Warbler. Hear him: "Reader, if you wish to hear this birds' love song in its fullest power, visit the deep woods in the early summer, as the shades of night deepen and most of the diurnal birds have retired, for it is then its lively, resonant voice falls upon the air unbroken, save by the silvery flute-like song of the Wood Thrush; and if your heart does not thrill with pleasure, it is dead to harmonious sounds." What more has been said in prose of the song of the English Nightingale?

The nests of the Golden Crown are placed on the ground, usually in a depression among leaves, and hidden in a low bush, log, or overhanging roots; when in an open space roofed over, a dome-shaped structure made of leaves, strippings from plants and grasses, with entrance on the side. The eggs are from three to six, white or creamy white, glossy, spotted as a rule rather sparingly over the surface. In shape it is like a Dutch oven, hence the name of the bird.

ARCTIC THREE-TOED WOODPECKER.

Well, here I am, one of those "three-toed fellows," as the Red-bellied Woodpecker called me in the February number of *BIRDS*. It is remarkable how impolite some folks can be, and how anxious they are to talk about their neighbors.

I don't deny I have only three toes, but why he should crow over the fact of having four mystifies me. I can run up a tree, zig-zag fashion, just as fast as he can, and play hide-and-seek around the trunk and among the branches, too. Another toe wouldn't do me a bit of good. In fact it would be in my way ; a superfluity, so to speak.

In the eyes of those people who like red caps, and red clothes, I may not be as handsome as some other Woodpeckers whose pictures you have seen, but to my eye, the black coat I wear, and the white vest, and square, saffron-yellow cap are just as handsome. The Ivory-billed Woodpeckers, who sent their pictures to *BIRDS* in the March number, were funny look-

ing creatures, *I* think, though they were dressed in such gay colors. The feathers sticking out at the back of the heads made them look very comical, just like a boy who had forgotten to comb his hair. Still they were spoken of as "magnificent" birds. Dear, dear, there is no accounting for tastes.

Can I beat the drum with my bill, as the four-toed Woodpeckers do ? Of course I can. Some time if you little folks are in a school building in the northern part of the United States, near a pine woods among the mountains, a building with a nice tin water-pipe descending from the roof, you may hear me give such a rattling roll on the pipe that any sleepy scholar, or teacher, for that matter, will wake right up. Woodpeckers are not always drumming for worms, let me tell you. Once in awhile we think a little music would be very agreeable, so with our chisel-like bills for drum-sticks we pound away on anything which we think will make a nice noise.



From col. Chi. Acad. Sciences

AMERICAN THREE-TOED WOODPECKER.
♂ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago

THE ARCTIC THREE-TOED WOODPECKER.

A GENERAL similarity of appearance is seen in the members of this family of useful birds, and yet the dissimilarity in plumage is so marked in each species that identification is easy from a picture once seen in BIRDS. This Woodpecker is a resident of the north and is rarely, if ever, seen south of the Great Lakes, although it is recorded that a specimen was seen on a telegraph pole in Chicago a few years ago.

The Black-backed Three-toed Woodpecker—the common name of the Arctic—has an extended distribution from the Atlantic to the Pacific, and from the northern boundary of the United States northward to the Arctic regions. Its favorite haunts are pine woods of mountainous country. In some portions of northern New England it is a rare summer resident. Audubon says that it occurs in northern Massachusetts, and in all portions of Maine covered by tall trees, where it resides. It has been found as far south as northern New York, and it is said to be a not uncommon resident in those parts of Lewis county, New York, which pertain to the Canadian fauna; for it is found both in the Adirondack region and in the coniferous forests in the Tug Hill range. In the vicinity of Lake Tahoe and the summits of the Sierra Nevada it is quite numerous in September at and above six thousand feet. It is common in the mountains of Oregon and is a rare winter visitant to the extreme northern portion of Illinois.

Observation of the habits of this Woodpecker is necessarily limited, as the bird is not often seen within the regions where it might be studied. Enough is known on the subject, however, to enable us to say that they are similar to those of the Woodpeckers of the states. They excavate their holes in the dead young pine trees at

a height from the ground of five or six feet, in this respect differing from their cousins, who make their nests at a much greater height. In the nests are deposited from four to six pure ivory-white eggs.

We suggest that the reader, if he has not already done so, read the biographies and study the pictures of the representatives of this family that have appeared in this magazine. To us they are interesting and instructive beyond comparison, with the majority of other feathered factors in creation, and present an exceedingly attractive study to those who delight in natural history. They are not singing birds, and therefore do not "furnish forth music to enraptured ears," but their agreeable call and love notes, their tenor drum-beats, their fearless presence near the habitations of man, winter and summer, their usefulness to man in the destruction of insect pests, their comparative harmlessness (for they cannot be denied subsistence), all prove that they should be ever welcome companions of him who was given dominion over the beasts of the field and the birds of the air.

In city parks where there are many trees, bushes, and thick shrubbery, a good many birds may be seen and heard near the middle of March. To-day, the 22nd of the month, in a morning stroll, we saw and heard the Song Sparrow, a Blue Bird, a Robin, and two Bluejays, and would, no doubt, have been gratified with the presence of other early migrants, had the weather been more propitious. The sun was obscured by clouds, a raw north wind was blowing, and rain, with threatened snow flurries, awakened the protective instinct of the songsters and kept them concealed. But now, these April mornings, if you incline to early rising, you may hear quite a concert, and one worth attending.

—C. C. M.

IRISH BIRD SUPERSTITIONS.

THE HEDGEWARBLER, known more popularly as the "Irish Nightingale," is the object of a most tender superstition. By day it is a roystering fellow enough, almost as impish as our American Mocking Bird, in its emulative attempts to demonstrate its ability to out-sing the original songs of any feathered melodist that ventures near its haunts among the reeds by the murmuring streams. But when it sings at night, and particularly at the exact hour of midnight, its plaintive and tender notes are no less than the voices of babes that thus return from the spirit land to soothe their poor, heart-aching mothers for the great loss of their darlings. The hapless little Hedge Sparrow has great trouble in raising any young at all, as its beautiful bluish-green eggs when strung above the hob are in certain localities regarded as a potent charm against divers witch spells, especially those which gain an entrance to the cabin through the wide chimney. On the contrary, the grayish-white and brown-mottled eggs of the Wag-tail are never molested, as the grotesque motion of the tail of this tiny attendant of the herds has gained for it the uncanny reputation and name of the Devil's bird.

THE STARLING, THE MAGPIE, AND THE CROW.

When the Starling does not follow the grazing cattle some witch charm has been put upon them. The Magpie, as with the ancient Greeks, is the repository of the soul of an evil-minded and gossiping woman. A round-tower or castle ruin unfrequented by Jackdaws is certainly haunted. The "curse of the crows" is quite as malevolent as the "curse of Cromwell." When a "Praheen Cark" or Hen Crow is found in the solitudes of mountain glens, away from human habitations, it assuredly possesses the

wandering soul of an impenitent sinner. If a Raven hover near a herd of cattle or sheep, a withering blight has already been set upon the animals, hence the song of the bard Benean regarding the rights of the kings of Cashel 1,400 years ago that a certain tributary province should present the king yearly "a thousand goodly cows, not the cows of Ravens." The Waxwing, the beautiful *Incendiaria avis* of Pliny, whose breeding haunts have never yet been discovered by man, are the torches of the *Bean-sidhe*, or Banshees. When the Cuckoo utters her first note in the spring, if you chance to hear it, you will find under your right foot a white hair; and if you keep this about your person, the first name you thereafter hear will be that of your future husband or wife.

FOUR MOURNFUL SUPERSTITIONS.

Four other birds provide extremely mournful and pathetic superstitions. The Linnet pours forth the most melancholy song of all Irish birds, and I have seen honest-hearted peasants affected by it to tears. On inquiry I found the secret cause to be the belief that its notes voiced the complaints of some unhappy soul in the spirit land. The changeless and interminable chant of the Yellow Bunting is the subject of a very singular superstition. Its notes, begun each afternoon at the precise hour of 3, are regarded as summons to prayer for souls not yet relieved from purgatorial penance. A variety of Finch has notes which resemble what is called the "Bride-groom's song" of unutterable dolor for a lost bride—a legend of superstition easily traceable to the German Hartz mountain peasantry; while in the solemn intensity of the Bittern's sad and plaintive boom, still a universally received token of spirit-warning, can be recognized the origin of the mournful cries of the wailing Banshee.



From col. Chi. Acad. Sciences.

BARTRAMIAN SANDPIPER.
 $\frac{2}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE BARTRAMIAN SANDPIPER.

THIS pretty shore bird, known as Bartram's Tattler, is found in more or less abundance all over the United States, but is rarely seen west of the Rocky Mountains. It usually breeds from the middle districts — Ohio, Indiana, Illinois, Iowa, Minnesota, and the Dakotas northward, into the fur country, and in Alaska. It is very numerous in the prairies of the interior, and is also common eastward. It has a variety of names, being called Field Plover, Upland Plover, Grass Plover, Prairie Pigeon, and Prairie Snipe. It is one of the most familiar birds on the dry, open prairies of Manitoba, where it is known as the "Quaily," from its soft, mellow note. The bird is less aquatic than most of the other Sandpipers, of which there

are about twenty-five species, and is seldom seen along the banks of streams, its favorite resorts being old pastures, upland, stubble fields, and meadows, where its nest may be found in a rather deep depression in the ground, with a few grass blades for lining. The eggs are of a pale clay or buff, thickly spotted with umber and yellowish-brown; usually four in number.

The Sandpiper frequently alights on trees or fences, like the Meadow Lark. This species is far more abundant on the plains of the Missouri river region than in any other section of our country. It is found on the high dry plains anywhere, and when fat, as it generally is, from the abundance of its favorite food, the grasshopper, is one of the most delicious imaginable.

MARSHALL SAUNDERS tells us that in Scotland seven thousand children were carefully trained in kindness to each other and to dumb animals.

It is claimed that not one of these in after years was ever tried for any criminal offense in any court. How does that argue for humane education? Is not this heart training of our boys and girls one which ought to claim the deepest sympathy and most ready support from us when we think of what it means to our future civilization? "A brutalized child," says this great-

hearted woman, "is a lost child." And surely in *permitting* any act of cruelty on the part of our children, we brutalize them, and as teachers and parents are responsible for the result of our neglect in failing to teach them the golden rule of kindness to all of God's creatures. It is said that out of two thousand criminals examined recently in American prisons, only twelve admitted that they had been kind to animals during youth. What strength does that fact contain as an argument for humane education?

THE NIGHTINGALE.

You have heard so much about the Nightingale that I am sure you will be glad to see my picture. I am not an American bird; I live in England, and am considered the greatest of all bird vocalists.

At midnight, when the woods are still and everybody ought to be asleep, I sing my best. Some people keep awake on purpose to hear me. One gentleman, a poet, wept because my voice sounded so melancholy. He thought I leaned my breast up against a thorn and poured forth my melody in anguish. Another wondered what music must be provided for the angels in heaven, when such music as mine was given to men on earth.

All that sounds very pretty, but between you and me, I'd sing another tune if a thorn should pierce my breast.

Indeed, I am such a little bird that a big thorn would be the death of me. No, indeed, I am always very happy when I sing. My mate wouldn't notice me at all if I didn't pour out my feel-

ings in song, both day and night. That is the only way I have to tell her that I love her, and to ask her if she loves me. When she says "yes," then we go to housekeeping, build a nest and bring up a family of little Nightingales. As soon as the birdies come out of their shell I literally change my tune.

In place of the lovely music which everybody admires, I utter only a croak, expressive of my alarm and anxiety. Nobody knows the trouble of bringing up a family better than I do. Sometimes my nest, which is placed on or near the ground, is destroyed with all the little Nightingales in it; then I recover my voice and go to singing again, the same old song: "I love you, I love you. Do you love me?"

Toward the end of summer we leave England and return to our winter home, way off in the interior of Africa. About the middle of April we get back to England again, the gentlemen Nightingales arriving several days before the lady-birds.



From coll. Mr F. Kaempfer.

NIGHTINGALE.
4 5 Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE NIGHTINGALE.

NO doubt those who never hear the song of the Nightingale are denied a special privilege. Keats' exquisite verses give some notion of it, and William Drummond, another English poet, has sung sweetly of the bird best known to fame. "Singer of the night" is the literal translation of its scientific name, although during some weeks after its return from its winter quarters in the interior of Africa it exercises its remarkable vocal powers at all hours of the day and night. According to Newton, it is justly celebrated beyond all others by European writers for the power of song. The song itself is indistinguishable, though numerous attempts, from the time of Aristophanes to the present, have been made to express in syllables the sound of its many notes; and its effects on those who hear it is described as being almost as varied as are its tones. To some they suggest melancholy; and many poets, referring to the bird in the feminine gender, which cannot sing at all, have described it as "leaning its breast against a thorn and pouring forth its melody in anguish." Only the male bird sings. The poetical adoption of the female as the singer, however, is accepted as impregnable, as is the position of Jenny Lind as the "Swedish Nightingale." Newton says there is no reason to suppose that the cause and intent of the Nightingales' song, unsurpassed though it be, differ in any respect from those of other birds' songs; that sadness is the least impelling sentiment that can be properly assigned for his apparently melancholy music. It may in fact be an expression of joy such as we fancy we interpret in the songs of many other birds. The poem, however, which we print on another page, written by an old English poet, best represents our own idea of the Nightin-

gale's matchless improvisation, as some call it. It may be that it is always the same song, yet those who have often listened to it assert that it is never precisely the same, that additional notes are introduced and the song at times extended.

The Nightingale is usually regarded as an English bird, and it is abundant in many parts of the midland, eastern, and western counties of England, and the woods, coppices, and gardens ring with its thrilling song. It is also found, however, in large numbers in Spain and Portugal and occurs in Austria, upper Hungary, Persia, Arabia, and Africa, where it is supposed to spend its winters.

The markings of the male and female are so nearly the same as to render the sexes almost indistinguishable.

They cannot endure captivity, nine-tenths of those caught dying within a month. Occasionally a pair have lived, where they were brought up by hand, and have seemed contented, singing the song of sadness or of joy.

The nest of the Nightingale is of a rather uncommon kind, being placed on or near the ground, the outworks consisting of a great number of dead leaves ingeniously put together. It has a deep, cup-like hollow, neatly lined with fibrous roots, but the whole is so loosely constructed that a very slight touch disturbs its beautiful arrangement. There are laid from four to six eggs of a deep olive color.

Towards the end of summer the Nightingale disappears from England, and as but little has been observed of its habits in its winter retreats, which are assumed to be in the interior of Africa, little is known concerning them.

It must be a wonderful song indeed that could inspire the muse of great poets as has that of the Nightingale.

THE BIRDS OF PARADISE.

THE far-distant islands of the Malayan Archipelago, situated in the South Pacific Ocean, the country of the bird-winged butterflies, princes of their tribe, the "Orang Utan," or great man-like ape, and peopled by Papuans and Malays—lands whose shores are bathed perpetually by a warm sea, and whose surfaces are covered with a most luxuriant tropical vegetation—these are the home of a group of birds that rank as the radiant gems of the feathered race. None can excel the nuptial dress of the males, either in the vividness of their changeable and rich plumage or the many strangely modified and developed ornaments of feather which adorn them.

The history of these birds is very interesting. Before the year 1598 the Malay traders called them "Manuk dewata," or God's birds, while the Portuguese, finding they had no wings or feet, called them *Passaros de sol*, or birds of the sun.

When the earliest European voyagers reached the Moluccas in search of cloves and nutmegs, which were then rare and precious spices, they were presented with dried skins of Birds so strange and beautiful as to excite the admiration even of these wealth-seeking rovers. John Van Linschoten in 1598 calls them "Avis Paradiseus, or Paradise birds," which name has been applied to them down to the present day. Van Linschoten tells us "that no one has seen these birds alive, for they live in the air, always turning towards the sun, and never alighting on the earth till they die." More than a hundred years later, Funnel, who accompanied Dampier and wrote of the voyage, saw specimens at Amboyna, and was told that they came to Banda to eat nutmegs, which intoxicated them and made them fall down senseless, when they were killed by ants.

In 1760 Linnaeus named the largest species *Paradisea apoda* (the footless Paradise bird). At that time no perfect specimen had been seen in Europe, and it was many years afterward when it was discovered that the feet had been cut off and buried at the foot of the tree from which they were killed by the superstitious natives as a propitiation to the gods. Wallace, who was the first scientific observer, writer, and collector of these birds, and who spent eight years on the islands studying their natural history, speaks of the males of the great Birds of Paradise assembling together to dance on huge trees in the forest, which have wide-spreading branches and large but scattered leaves, giving a clear space for the birds to play and exhibit their plumes. From twelve to twenty individuals make up one of these parties. They raise up their wings, stretch out their necks and elevate their exquisite plumes, keeping them in a continual vibration. Between whiles they fly across from branch to branch in great excitement, so that the whole tree is filled with waving plumes in every variety of attitude and motion. The natives take advantage of this habit and climb up and build a blind or hiding place in a tree that has been frequented by the birds for dancing. In the top of this blind is a small opening, and before day-light, a native with his bow and arrow, conceals himself, and when the birds assemble he deftly shoots them with his blunt-pointed arrows.

The great demand for the plumage of Birds of Paradise for decorative purposes is causing their destruction at a rapid rate, and this caprice of a passing fashion will soon place one of the most beautiful denizens of our earth in the same category as the great Auk and Dodo.—*Cincinnati Commercial-Gazette*.

TO A NIGHTINGALE.

As it fell upon a day,
In the merry month of May,
Sitting in a pleasant shade,
Which a grove of myrtles made ;
Beasts did leap, and birds did sing,
Trees did grow, and plants did spring;
Everything did banish moan,
Save the nightingale alone.
She, poor bird, as all forlorn,
Leaned her breast up—till a thorn;
And there sung the dolefull'st ditty,
That to hear it was great pity.
Fie, fie, fie, now would she cry;
Teru, teru, by and by;
That, to hear her so complain,
Scarce I could from tears refrain;
For her griefs, so lively shewn,
Made me think upon mine own.
Ah !—thought I—thou mourn'st in vain;
None takes pity on thy pain :
Senseless trees, they cannot hear thee ;
Ruthless bears, they will not cheer thee ;
King Pandion, he is dead ;
All thy friends are lapped in lead ;
All thy fellow-birds do sing,
Careless of thy sorrowing !

—RICHARD BARNFIELD.
Old English Poet.

THE ROSEATE SPOONBILL.

SPECIMENS of this bird when seen for the first time always excite wonder and admiration. The beautiful plumage, the strange figure, and the curiously shaped bill at once attract attention. Formerly this Spoonbill was found as far west as Illinois and specimens were occasionally met with about ponds in the Mississippi Bottoms, below St. Louis. Its habitat is the whole of tropical and subtropical America, north regularly to the Gulf coast of the United States.

Audubon observed that the Roseate Spoonbill is to be met with along the marshy or muddy borders of estuaries, the mouths of rivers, on sea islands, or keys partially overgrown with bushes, and still more abundantly along the shores of the salt-water bayous, so common within a mile or two of the shore. There it can reside and breed, with almost complete security, in the midst of an abundance of food. It is said to be gregarious at all seasons, and that seldom less than half a dozen may be seen together, unless they have been dispersed by a tempest. At the approach of the breeding season these small flocks come together, forming immense collections, and resort to their former nesting places, to which they almost invariably return. The birds moult late in May, and during this time the young of the previous year conceal themselves among the mangroves, there spending the day, returning at night to their feeding grounds, but keeping apart from the old birds, which last have passed through their

spring moult early in March. The Spoonbill is said occasionally to rise suddenly on the wing, and ascend gradually in a spiral manner, to a great height. It flies with its neck stretched forward to its full length, its legs and feet extended behind. It moves with easy flappings, until just as it is about to alight, when it sails over the spot with expanded wing and comes gradually to the ground.

Usually the Spoonbill is found in the company of Herons, whose vigilance apprises it of any danger. Like those birds, it is nocturnal, its principal feeding time being from near sunset until daylight. In procuring its food it wades into the water, immerses its immense bill in the soft mud, with the head, and even the whole neck, beneath the surface, moving its partially opened mouth to and fro, munching the small fry—insects or shell-fish—before it swallows them. Where many are together, one usually acts as a sentinel. The Spoonbill can alight on a tree and walk on the large branches with much facility.

The nests of these birds are platforms of sticks, built close to the trunks of trees, from eight to eighteen feet from the ground. Three or four eggs are usually laid. The young, when able to fly, are grayish white. In their second year they are unadorned with the curling feathers on the breast, but in the third spring they are perfect.

Formerly very abundant, these attractive creatures have greatly diminished by the constant persecution of the plume hunters.



From col. Chi. Acad. Sciences.

ROSEATE SPOONBILL.
 $\frac{1}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE ROSEATE SPOONBILL.

If my nose and legs were not so long, and my mouth such a queer shape, I would be handsome, wouldn't I? But my feathers are fine, everybody admits that—especially the ladies.

"How lovely," they all exclaim, when they see one of us Spoonbills. "Such a delicate, delicate pink!" and off they go to the milliners and order a hat trimmed with our pretty plumes.

That is the reason so few of us spoonbills are to be found in certain localities now-a-days, Florida especially. Fashion has put most of us to death. Shame, isn't it, when there are silk, and ribbon, and flowers in the world? Talk to your mothers and sisters, boys, and plead with them to let the birds alone.

We inhabit the warmer parts of the world; South and Central America, Mexico, and the Gulf regions of the United States. We frequent the shores, both on the sea coast and in the interior; marshy, muddy ground is our delight.

When I feel like eating something nice, out I wade into the water, run my long bill, head and neck, too, sometimes, into the soft mud, move my bill to and fro, and such a lot of small fry

as I do gather—insects and shell fish—which I munch and munch before I swallow.

I am called a "wader" for doing this. My legs are not any too long, you observe, for such work. I am very thankful at such times that I don't wear stockings or knickerbockers.

We are friendly with Herons and like to have one or two of them accompany us. They are very vigilant fellows, we find, and make good sentinels, warning us when danger approaches.

Fly? Oh, yes, of course we do. With our neck stretched forward and our legs and feet extended behind, up we go gradually in a spiral manner to a great height.

In some countries, they say, our beaks are scraped very thin, polished, and used as a spoon, sometimes set in silver. I wonder if that is the reason we are called Spoonbills?

The Spoonbills are sociable birds; five or six of us generally go about in company; and when it comes time for us to raise families of little Spoonbills, we start for our nesting place in great flocks; the same place where our nests were built the year before.

DICKCISSEL.

RR. P. M. SILLOWAY, in his charming sketches, "Some Common Birds," writes: "The Cardinal frequently whistles the most gaily while seated in the summit of the bush which shelters his mate on her nest. It is thus with Dickcissel, for though his ditties are not always eloquent to us, he is brave in proclaiming his happiness near the fountain of his inspiration. While his gentle mistress patiently attends to her household in some low bush or tussock near the hedge, Dick flutters from perch to perch in the immediate vicinity and voices his love and devotion. Once I flushed a female from a nest in the top of an elm bush along a railroad while Dick was proclaiming his name from the top of a hedge within twenty feet of the site. Even while she was chirping anxiously about the spot, apprehending that her home might be harried by ruthless visitors, he was brave and hopeful, and tried to sustain her anxious mind by ringing forth his cheerful exclamations."

Dick has a variety of names, the Black-throated Bunting, Little Field Lark, and "Judas-bird." In general appearance it looks like the European House Sparrow, averaging a trifle larger.

The favorite resorts of this Bunting are pastures with a sparse growth of stunted bushes and clover fields. In these places, its unmusical, monotonous song may be heard throughout the day during the breeding season. Its song is uttered from a tall weed, stump,

or fence-stake, and is a very pleasing ditty, says Davie, when its sound is heard coming far over grain fields and meadows, in the blaze of the noon-day sun, when all is hushed and most other birds have retired to shadier places.

As a rule, the Dickcissels do not begin to prepare for housekeeping before the first of June, but in advanced seasons the nests are made and the eggs deposited before the end of May. The nest is built on the ground, in trees and in bushes, in tall grass, or in clover fields. The materials are leaves, grasses, rootlets, corn husks, and weed stems; the lining is of fine grasses, and often horse hair. It is a compact structure. Second nests are sometimes built in July or August. The eggs number four or five, almost exactly like those of the Bluebird.

The summer home of Dickcissel is eastern United States, extending northward to southern New England and Ontario, and the states bordering the great lakes. He ranges westward to the edge of the great plains, frequently to southeastern United States on the migration. His winter home is in tropical regions, extending as far south as northern South America. He is commonly regarded as a Lark, but is really a Finch.

In the transactions of the Illinois Horticultural Society, Prof. S. A. Forbes reports that his investigations show that sixty-eight per cent. of the food of the Dickcissels renders them beneficial to horticulture, seven per cent. injurious, and twenty-five per cent. neutral, thus leaving a large balance in their favor.

THOUGHTS.

Who knows the joy a flower knows
When it blows sweetly?
Who knows the joy a bird knows
When it goes fleetly?

Bird's wing and flower stem—
Break them, who would?
Bird's wing and flower stem—
Make them, who could?

—*Harper's Weekly.*



From col. Chi. Acad. Sciences.

DICKCISSEL.
 $\frac{2}{3}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898 Chicago.

THE DICKCISSEL.

You little folks, I'm afraid, who live or visit in the country every summer, will not recognize me when I am introduced to you by the above name. You called me the Little Field Lark, or Little Meadow Lark, while all the time, perched somewhere on a fence-stake, or tall weed-stump, I was telling you as plain as I could what my name really is.

"*See, see,*" I said, "*Dick, Dick—Cissel, Cissel.*"

To tell you the truth I don't belong to the Lark family at all. Simply because I wear a yellow vest and a black bow at my throat as they do doesn't make me a Lark. You can't judge birds, anymore than people, by their clothes. No, I belong to the Finch, or Bunting family, and they who call me the *Black-throated Bunting* are not far from right.

I am one of the birds that go south in winter. About the first of April I get back from the tropics and really I find some relief in seeing the hedges bare, and the trees just putting on their summer dress. In truth

I don't care much for buds and blossoms, as I only frequent the trees that border the meadows and cornfields. Clover fields have a great attraction for me, as well as the unbroken prairie.

I sing most of the time because I am so happy. To be sure it is about the same tune, "*See, see,—Dick, Dick—Cissel, Cissel,*" but as it is about myself I sing I never grow tired of it. Some people do, however, and wish I would stop some time during the day. Even in the hottest noonday you will see me perched on a fence-stake or a tall weed-stalk singing my little song, while my mate is attending to her nest tucked away somewhere in a clump of weeds, or bush, very near the ground.

There, I am sorry I told you that. You may be a bad boy, or a young collector, and will search this summer for my nest, and carry it and all the pretty eggs away. Think how sorrowful my mate would be, and I, no longer happy, would cease to sing, "*See, See,—Dick, Dick, Cissel, Cissel.*"

THE DUSKY GROUSE.

UNDER various names, as Blue Grouse, Grey Grouse, Mountain Grouse, Pine Grouse, and Fool-hen, this species, which is one of the finest birds of its family, is geographically distributed chiefly throughout the wooded and especially the evergreen regions of the Rocky Mountains to the Pacific and northward into British America. In the mountains of Colorado Grouse is found on the border of timber line, according to Davie, throughout the year, going above in the fall for its principal food—grasshoppers. In summer its flesh is said to be excellent, but when frost has cut short its diet of insects and berries it feeds on spruce needles and its flesh acquires a strong flavor. Its food and habits are similar to those of the Ruffed Grouse. Its food consists of insects and the berries and seeds of the pine cone, the leaves of the pines, and the buds of trees. It has also the same habits of budding in the trees during deep snows. In the Blue Grouse, however, this habit of remaining and feeding in the trees is more decided and constant, and in winter they will fly from tree to tree, and often are plenty in the pines, when not a track can be found in the snow. It takes keen and practiced eyes to find them in the thick branches of the pines. They do not squat and lie closely on a limb like a quail, but stand up, perfectly still, and would readily be taken for a knot or a broken limb. If they move at all it is to take flight, and with a sudden whir they are away, and must be looked for in in another tree top.

Hallock says that in common with the Ruffed Grouse (see *BIRDS*, Vol. I, p. 220), the packs have a habit of

scattering in winter, two or three, or even a single bird, being often found with no others in the vicinity, their habit of feeding in the trees tending to separate them.

The size of the Dusky Grouse is nearly twice that of the Ruffed Grouse, a full-grown bird weighing from three to four pounds. The feathers are very thick, and it seems fitly dressed to endure the vigor of its habitat, which is in the Rocky Mountains and Sierra Nevada country only, and in the pine forests from five to ten thousand feet above the level of the sea. The latter height is generally about the snow line in these regions. Although the weather in the mountains is often mild and pleasant in winter, and especially healthy and agreeable from the dryness and purity of the atmosphere, yet the cold is sometimes intense.

Some years ago Mr. Hallock advised that the acclimation of this beautiful bird be tested in the pine forests of the east. Though too wild and shy, he said, to be domesticated, there is no reason why it might not live and thrive in any pine lands where the Ruffed Grouse is found. Since the mountain passes are becoming threaded with railroads, and miners, herders, and other settlers are scattering through the country, it will be far easier than it has been to secure and transport live birds or their eggs, and it is to be hoped the experiment will be tried.

This Grouse nests on the ground, often under shelter of a hollow log or projecting rock, with merely a few pine needles scratched together. From eight to fifteen eggs are laid, of buff or cream color, marked all over with round spots of umber-brown.



From col. Ch. Acad. Sciences.

DUSKY GROUSE,
 $\frac{1}{2}$ Life-size.

Copyright by
Nature Study Pub. Co., 1888, Chicago.

APPLE BLOSSOM TIME.

The time of apple blooms has come again,
And drowsy winds are laden with perfume;
In village street, in grove and sheltered glen
The happy warblers set the air atune.

Each swaying motion of the bud-sweet trees
Scatters pale, fragrant petals everywhere;
Reveals the tempting nectar cups to bees
That gild their thighs with pollen. Here and there

The cunning spoilers roam, and dream and sip
The honey-dew from chalices of gold;
The brimming cups are drained from lip to lip
Till, cloyed with sweets, the tiny gauze wings fold.

Above the vine-wreathed porch the old trees bend,
Shaking their beauty down like drifted snow:
And as we gaze, the lovely blossoms send
Fair visions of the days of long ago.

Yes, apple blossom time has come again,
But still the breezes waft the perfumes old,
And everywhere in wood, and field, and glen
The same old life appears in lovelier mold.

—NORA A. PIPER.

LET US ALL PROTECT THE EGGS OF THE BIRDS.

ELIZABETH NUNEMACHER, in *Our Animal Friends*, writes thus of her observation of birds. Would that her suggestions for their protection might be heeded.

"Said that artist in literature, Thomas Wentworth Higginson: 'I think that, if required, on pain of death to name instantly the most perfect thing in the universe, I would risk my fate on a bird's egg; . . . it is as if a pearl opened and an angel sang.' But far from his beautiful thought was the empty shell, the mere shell of the collector. How can he be a bird lover who, after rifling some carefully tended nest, pierces the two ends of one of these exquisite crusts of winged melody, and murderously blows one more atom of wings and song into nothingness? The inanimate shell, however lovely in color, what is it? It is not an egg; an egg comprehends the contents, the life within. Aside from the worthlessness of such a possession, each egg purloined means we know not what depth of grief to the parent, and a lost bird life; a vacuum where song should be.

People who love birds and the study of them prefer half an hour's personal experience with a single bird to a whole cabinet of "specimens." Yet a scientist recently confessed that he had slain something like four hundred and seventy-five Redstarts, thus exterminating the entire species from a considerable range of country, to verify the fact of a slight variation in color. One would infinitely prefer to see one Redstart in the joy of life to all that scientific lore could impart regarding the entire family of Redstarts by such wholesale butchery, which nothing can excuse.

We hear complaints of the scarcity of Bluebirds from year to year. I have watched, at intervals since early April, the nest of a single pair of Bluebirds in an old apple tree. On April 29th there were four young birds in the nest. On May 4th they had flown; an addition was made to the dwelling, and one egg of a second brood was deposited. On May 31st the nest again held four young Bluebirds. June 15th saw this second quartette leave the apple tree for the outer world, and thinking surely that the little mother had done, I appropriated the nest; but on June 25th I found a second nest built, and one white egg, promising a third brood. From the four laid this time, either a collector or a Bluejay deducted one, and on July 14th the rest were just out of the shell. This instance of the industry of one pair of Bluebirds proves that their scarcity is no fault of theirs. I may add that the gentle mother suffered my frequent visits and my meddling with her nursery affairs without any show of anger or excitement, uttering only soft murmurs, which indicated a certain anxiety. May not the eleven young Bluebirds mean a hundred next season, and is not the possessor of the missing egg guilty of a dozen small lives?"

We have observed that the enthusiasm of boys for collecting eggs is frequently inspired by licensed "collectors," who are known in a community to possess many rare and valuable specimens. Too many nests are despoiled for so-called scientific purposes, and a limit should be set to the number of eggs that may be taken by any one for either private or public institutions. Let us influence the boys to "love the wood-rose, and leave it on its stalk."



CHICAGO COLORTYPE CO., CHIC. & NEW YORK.

From col. Chi. Acad. Sciences.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

1. Spotted Sandpiper. 2. Bartramian Sandpiper. 3. Marbled Godwit. 4. King Rail. 5. American Coot.
6. Least Tern. 7. Sooty Tern. 8. Common Murre. 9. Black Tern. 10. Herring Gull.

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

Mrs. Wren, in a very contented frame of mind, sat upon her nest, waiting with an ever growing appetite for that delicious spider or nice fat canker worm which her mate had promised to fetch her from the orchard.

"How happy I am," she mused, "and how thankful I ought to be for so loving a mate and such a dear, little cozy home. Why, keeping house and raising a family is just no trouble at all. Indeed—" but here Mrs. Wren's thoughts were broken in upon by the arrival of Mrs. John, who announced, as she perched upon the rim of the tin-pot and looked disdainfully around, that she had but a very few minutes to stay.

"So this is the cozy nest your husband is so fond of talking about," she said, her bill in the air. "My, my, whatever possessed you, my dear, to begin housekeeping in such humble quarters. Everything in this world depends upon appearances; the sooner you find that out, Jenny, the better. From the very first I was determined to begin at the top. The highest pole in the neighborhood, or none, I said to Mr. John when he was looking for a site on which to build our house; and to do him justice Mr. Wren never thought of anything lower himself. A tin-pot, indeed, under a porch. Dear,

dear!" and Mrs. John's bill turned up, and the corners of her mouth turned down in a very haughty and disdainful manner.

"I-didn't-know, I'm-sure," faltered poor little Mrs. Jenny, her feathers drooping at once. "I-thought our little house, or flat, was very nice and comfortable. It is in an excellent neighborhood, and our landlord's family is—"

"Oh, bother your landlord's family," interrupted Mrs. John impolitely. "All your neighbors are tired and sick of hearing Mr. Wren talk about his landlord's family. The way he repeats their sayings and doings is nauseating, and as for naming your brood after them, why—" Mrs. John shrugged her wings and laughed scornfully.

Mrs. Wren's head feathers rose at once, but experience had taught her the folly of quarreling with her aunt, so she turned the subject by inquiring solicitously after her ladyship's health.

"Oh, its only fair, fair to middlin'," returned Mrs. John, poking her bill about the edge of the nest as though examining its lining. "I told Mr. John this morning that I would be but a shadow of myself after fourteen days brooding, if he was like the other gentlemen Wrens in the neighborhood. Catch *me* sitting the day

through listening to him singing or showing off for my benefit. No, indeed! He is on the nest now, keeping the eggs warm, and I told him not to dare leave it till my return."

Mrs. Jenny said nothing, but she thought what her dear papa would have done under like circumstances.

"All work and no play," continued Mrs. John, "makes dull women as well as dull boys. That was what my mamma said when she found out papa meant her to do all the work while he did the playing and singing. Dear, dear, how many times I have seen her box his ears and drive him onto the nest while she went out visiting," and at the very recollection Mrs. John flirted her tail over her back and laughed loudly.

"How many eggs are you sitting upon this season, Aunt?" inquired Mrs. Jenny, timidly.

"Eight. Last year I hatched out nine; as pretty a brood as you would want to see. If I had time, Jenny, I'd tell you all about it. How many eggs are under you?"

"Six," meekly said Jenny, who had heard about that brood scores of times, "we thought—we thought—"

"Well?" impatiently, "you thought what?"

"That six would be about as many as we could well take care of. I am sure it will keep us both busy finding worms and insects for even that number of mouths."

"I should think it would" chuckled Mrs. John, nodding her head wisely, "but—" examining a feather which she had drawn out of the nest with her bill, "what is this? A *chicken* feather, as I live; a big, coarse,

chicken feather. And straw too, instead of hay. Ah! little did I think a niece of mine would ever furnish her house in such a shabby manner," and Mrs. John, whose nest was lined with horse-hair, and the downiest geese feathers which her mate could procure, very nearly turned green with shame and mortification.

Mrs. Jenny's head-feathers were bristling up again when she gladly espied Mr. Wren flying homeward with a fine wriggling worm in his bill.

"Ah, here comes your hubby," remarked Mrs. John, "he's been to market, I see. Well, ta, ta, dear. Run over soon to see us," and off Mrs. John flew to discuss Mrs. Jenny's house-keeping arrangements with one of her neighbors.

Mr. Wren's songs and antics failed to draw a smile from his mate the remainder of that day. Upon her nest she sat and brooded, not only her eggs, but over the criticisms and taunts of Mrs. John. Straw, chicken-feathers, and old tin pots occupied her thoughts to the exclusion of everything else, and it was not without a feeling of shame she recalled her morning's happiness and spirit of sweet content. The western sky was still blushing under the fiery gaze of the sun, when Mrs. Jenny fell into a doze and dreamed that she, the very next day, repaid Mrs. John Wren's call. The wind was blowing a hurricane and the pole on which Mrs. John's fine house stood, shook and shivered till Mrs. Jenny looked every minute for pole and nest and eggs to go crashing to the ground.

"My home," thought she, trembling with fear, "though humble, is built

upon a sure foundation. Love makes her home there, too. Dear little tin-pot! Chicken feathers or straw, what does it matter?" and home Mrs. Jenny hastened, very thankful in her dream for the protecting walls, and overhanging porch, as well as the feeling of security afforded by her sympathetic human neighbors.

The fourteen days in truth did seem very long to Mrs. Wren, but cheered by her mate's love songs and an occasional outing—all her persuasions could not induce Mr. Wren to brood the eggs in her absence—it wasn't a man's work, he said—the time at length passed, and the day came when a tiny yellow beak thrust itself through the shell, and in a few hours, to the parents delight, a little baby Wren was born.

Mr. Wren was so overcome with joy that off he flew to the nearest tree, and with drooping tail and wings shaking at his side, announced, in a gush of song, to the entire neighborhood the fact that he was a papa.

"A pa-pa, is it?" exclaimed Bridget, attracted by the bird's manner to approach the nest. "From watchin' these little crathers it do same I'm afther understandin' bird talk and bird-ways most like the misthress herself," and with one big red finger she gently pushed the angry Mrs. Wren aside and took a peep at the new born bird.

"Howly mither!" said she, retreating in deep disgust, "ov all the skinny, ugly little bastes! Shure and its all head and no tail, with niver a feather to kiver its nakedness. It's shamed I'd be, Mr. Wren, to father an ugly crather loike that, so I would," and Bridget, who had an idea that young

birds came into the world prepared at once to fly, shook her head sadly, and went into the house to inform the family of the event.

One by one the children peeped into the nest and all agreed with Bridget that it was indeed a very ugly little birdling which lay there.

"Wish I could take it out, mama," said Dorothy, "and put some of my doll's clothes on it. It is such a shivery looking little thing."

"Ugh!" exclaimed Walter, "what are those big balls covered with skin on each side of its head; and when will it look like a bird, mama?"

"Those balls are its eyes," she laughingly replied, "which will open in about five days. The third day you will perceive a slate-colored down or fuzz upon its head. On the fourth its wing feathers will begin to show. On the seventh the fuzz will become red-brown feathers on its back and white upon its breast. The ninth day it will fly a little way, and on the twelfth will leave its nest for good."

"An' its a foine scholard ye's are, to be shure, mum," said Bridget in open-mouthed admiration. "Whoiver 'ud hev thought a mite ov a crather loike that 'ud be afther makin' so interesting a study. Foreninst next spring, God willin,' she added, "its meself, Bridget O'Flaherty, as will be one ov them same."

"One of them same what?" inquired her mistress laughingly.

"Horn-ith-owl-ogists, mum," replied Bridget, not without much difficulty, and with a flourish of her fine red arms and a triumphant smile upon her round face, Bridget returned to her kitchen and work again.

SUMMARY.

Page 126.

OVENBIRD—*Seiurus aurocapellus*. Other names: "The Teacher," "Wood Wagtail," "Golden Crowned Accentor."

RANGE—United States to Pacific Slope.

NEST—On the ground, oven-shape.

EGGS—Three to six, white or creamy white, glossy, spotted.

Page 130.

ARCTIC THREE-TOED WOODPECKER—*Picoides arcticus*. Other name: "Black-backed Three-toed Woodpecker."

RANGE—Northern North America, south to northern border of the United States, and farther on high mountain ranges. In the mountains of the west (Sierra Nevada, etc.) south to about 39°, where it breeds.

NEST—In dead trees, not more than five or six feet from the ground.

EGGS—Four to six, pure ivory white.

Page 134.

BARTRAMIAN SANDPIPER—*Bartramia longicauda*. Other names: "Bartram's Tattler," "Prairie Pigeon," "Prairie Snipe," "Grass Plover," and "Quailly."

RANGE—Eastern North America, north to Nova Scotia and Alaska, south in winter as far as southern South America.

NEST—In a slight depression of the ground.

EGGS—Four, of a pale clay or buff, thickly spotted with umber and yellowish brown.

Page 138.

NIGHTINGALE—*Motacilla luscini* (Linn.)
RANGE—England, Spain, Portugal, Austria, south to the interior of Africa.

NEST—Cup shape, made of dry leaves, neatly lined with fibrous roots.

EGGS—Four to six, of a deep olive color.

Page 143.

ROSEATE SPOONBILL—*Ajaja ajaja*.

RANGE—Southern United States and southward into southern South America.

NEST—Platform of sticks, built close to the trunk of a tree, from eight to eighteen feet from the ground.

EGGS—Three or four, white, or buffy-white, blotched, spotted, and stained with various shades of brown.

Page 147.

DICKCISSEL—*Spiza americana*. Other names: "Black-throated Bunting," "Little Field Lark," and "Judas-bird."

RANGE—Eastern United States to the Rocky Mountains, north to Massachusetts, New York, Wisconsin, Minnesota, etc., south in winter to northern South America.

NEST—On the ground, in trees, and in bushes.

EGGS—Four or five, almost exactly like those of the Bluebird.

Page 151.

DUSKY GROUSE—*Dendragapus obscurus*.

RANGE—Rocky Mountains, west to Wahsatch, north to central Montana, south to New Mexico and Arizona.

NEST—On the ground, under shelter of a hollow log or projecting rock, with merely a few pine needles scratched together.

EGGS—Eight to fifteen, of buff or cream color, marked all over with small round spots of umber-brown.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

MAY, 1898.

No. 5.

COLOR IN MUSIC.

"No ladder needs the bird, but skies
To situate its wings,
Nor any leader's grim baton
Arraigns it as it sings.
The implements of bliss are few—
As Jesus says of Him,
'Come unto me,' the moiety
That wafts the cherubim."

—EMILY DICKINSON.

 H, Music! voice inspired of all our joys and sorrows, of all our hopes and disappointments, to thee we turn for life, for strength and peace. The choristers of Nature—the birds—are our teachers. How free, how vital, how unconstrained! The bird drops into song and delicious tones as easily as he drops from the bough through the air to the twig or ground. To learn of the bird has been found to be a truthful means whereby children's attention and interest may be held long enough to absorb the sense of intervals in pitch, notation on the staff, and rhythms.

In teaching a child, it is obvious that the desire to learn must be kept widely awake, and heretofore black notes on five lines and four spaces, with heiroglyphics at the beginning to denote clef, and figures to indicate the rhythm of the notes, have never interested children. But now, color and the bird with its egg for a note, telegraph wires for the staff, and swinging the pulsing rhythm instead of beating the time, has charmed children into accomplishment of sight singing and sweet purity of tone. Formerly, and by the old method,

this was a long and laborious task, barely tolerated by the musical child and disliked by the little soul unawakened thereby to its own silent music.

It may be questioned, what is the new method, and what its value? The method is this: In recognizing tone, the finer and more sensitive musician has realized that certain intervals of scale suggested to their minds or reminded them of certain colors. Thus the Doh, the opening and closing tone of the scale, the foundation and cap stone, suggested Red, which is the strong, firm color of colors, and on the ethical side suggested Love, which is the beginning and end, the Alpha and Omega of Life. This firmness and strength is easy to recognize in the tune "America," where the tonic Doh is so insistent, and colors the whole melody "The Star-Spangled Banner" and "Hail Columbia" are other strong examples.

The Dominant or fifth tone in the scale is clear and pure, which the blue of heaven represents, and so also the quality of aspiration or exaltation is sounded. This is joyously clear in the Palestrina "Victory," set to the Easter hymn, "The strife is o'er the battle done."

The Mediant or third of the scale is peaceful and calm, and the color Yellow is suggested, with its vital, radiating, sunshiny warmth and comfort. The "O, rest in the Lord" from "Elijah" exemplifies this quality of restful and peaceful assurance. Of the tones of the Dominant chord besides the Soh which we have considered, the Ti or seventh interval is full of irresolution and unrest, crying for completion in the strong and resolute Doh. This unrest and yearning suggest the mixed color Magenta. The quality is expressed in bits of an old English song entitled "Too Late." The insistency of the seventh is felt in the strong measures with the words, "oh let us in, oh, let us in."

The Ray or second of the scale which completes the Dominant chord is rousing and expectant—quite in contrast to the eagerness and despair of the seventh. This second is represented by orange, the mixture of red and yellow between which it stands being equally related to both, with the expectancy born of trust and rest which the Mediant expresses, and the rousing hopefulness which is the outcome of the firm strength and conviction of the Doh. As a musical example take Pleyel's hymn set to the words: "Children of the Heavenly King." In the remaining tones of the sub-dominant chord Fah and Lah, we find Fah the fourth has a distinctively leaning tendency, a solemnity which calls forth the direct opposite of the seventh or Ti which yearns upward and cannot be otherwise satisfied, while Fah is a downward leaning, a protective and even-solemnly grand, dependent tone. We hear this in the dead march in "Saul," and the almost stern reproach in the two measures of "Too late, too late, ye cannot enter now." Fah's tonal qualities suggest the protective green.

Lah, or the sixth tone is expres-

sive of tender sympathy, and unlike Fah, is a variable tone which may turn upward or downward for rest. It is found prominently in Minor music and is represented by the half mourning color of lavender or violet. "By the sad sea-waves" is a good illustration of this gentle wail.

While these emotional effects are certainly true, it may be well to remind the reader that when modulation comes in, the character of the tones is necessarily changed; just as the appearance and impression of an individual will be modified and altered by change of surroundings. Consequently these effects are strong only in the pure unmodulated key.

In awakening the musical sensibility of the child, we are rescuing it from probable loss of appreciation for the noble, and true, and fine. This loss is shown by such as are pleased with the trash of the "popular" tunes of a day—tunes which express nothing worthy of the great gift of expression. Music is life in all its moods and tenses, but we should be sensitive only to that which is the expression of the best and most helpful.

Through the many percepts of sight of the birds which represent the intervals of the scale, of touch in pasting the little colored discs on the staff, of ear in singing the tones of the Doh bird, the Me bird, the Soh bird, etc., the child finds the symbols and mechanics of musical notation entrancing instead of tedious.

In teaching the rythms and value of notes the imagination is called upon in marking off rooms instead of measures, and putting one or more bird eggs into them, naming them with the time names and swinging the rythm with a snap-tape measure.

AGNES STEWART.

In charge of classes in Color Music and assistant teacher of Voice in The Mrs. John Vance Cheney School, Steinway Hall, Chicago.

CONTENTMENT.



ONCE on a time an old red hen
Went strutting around with pompous clucks,
For she had little babies ten,
A part of which were tiny ducks ;
" 'Tis very rare that hens," said she,
" Have baby ducks, as well as chicks ;
But I possess, as you can see,
Of chickens four and ducklings six !"

A season later, this old hen
Appeared, still cackling of her luck,
For though she boasted babies ten,
Not one among them was a duck !
" 'Tis well," she murmured, brooding o'er
The little chicks of fleecy down,
" My babies now will stay ashore,
And, consequently, cannot drown !"

The following spring the old red hen
Clucked just as proudly as of yore ;
But lo ! her babies were ducklings ten,
Instead of chickens, as before !
" 'Tis better," said the old red hen,
As she surveyed her waddling brood,
" A little water, now and then,
Will surely do my darlings good !"

But, oh ! alas, how very sad !
When gentle spring rolled round again,
The eggs eventuated bad,
And childless was the old red hen !
Yet, patiently she bore her woe,
And still she wore a cheerful air,
And said : " 'Tis best these things are so,
For babies are a dreadful care !"

I half suspect that many men,
And many, many women too,
Could learn a lesson from the hen,
With foliage of vermilion hue.
She ne'er presumed to take offence
At any fate that might befall,
But meekly bowed to Providence.—
She was contented—that was all !

—*Eugene Field.*

THE FASCINATION OF BIRD STUDY.

WHEN one knows six birds by sight or sound, it has been said, he is lost.

After that he cannot rest until he knows fifty, or a hundred, or two hundred—in his back-door yard, or down in the orchard, or across the farm. It is not easy to explain wherein lies the fascination of "naming the birds without a gun." The humility of the scoffer, caught un-awares, and taught his first six before he knows it, is something pathetic and instructive. Few mortals are proof against the charm—when once the first half-dozen are conquered. The first three come easy. Most of us know the Crow—and the Robin—and the Bluebird—and—and—the Sparrow—until we discover that there are more than a dozen varieties of Sparrow, and perceive that this common brown bird, hopping so cheerily in and out of the bushes, may be a Song Sparrow or a Chipping Sparrow or a White-Throated or White-Crowned or any one of the dozen—or even the Cocky English Sparrow, despised by ornithologist and tyro alike. When to the Crow and Robin and Bluebird one has added the Blackbird—both the Keel-tailed and the Redwing—and the Meadow Lark or the Highhole, the charm begins to work. Armed with opera-glass and bird book, the victim casts convention to the winds. He stands in the full glare of the public highway, his glass focused on an invisible spot, an object of ridicule to men and dogs. He crawls on his hands and knees through underbrush, under barbed fences and over stone walls. He sits by the hour waiting for a Vireo to come down from the

topmost branch within range of his glass. He forgets luncheon and engagements. And what does he bring home? Certainly not the river and sky, and seldom even a feather.

Books on birds, continues the *Boston Evening Transcript*, like good wine, need no bush at this season of the year; the Golden-winged Woodpecker drums announcement on every limb; the Redwing Blackbird gurgles and chuckles and calls across the swamp; and the Lesser Sparrows and Bluebirds and Robins wake the morning to the weaving of new song. The hand reaches out for the familiar bird-book; that last note was a strange one. It is a new bird—or merely one forgotten? The delight begins all over with the first Bluebird's call, "a mere wandering voice in the air."

"The Department of Agriculture," Miss Merriam tells us, in her new book, "Birds of Village and Field," "realizing the losses that often result from the ignorant sacrifice of useful birds, constituted the Division of Ornithology, now a part of the Biological Survey, a court of appeal where accusations against the birds could be received and investigated. The method used by the division is the final one—the examination of stomach contents to prove the actual food of the birds. After the examination of about eighty birds, the only one actually condemned to death is the English Sparrow. Of all the accused Hawks, only three have been found guilty of the charges made against them—the Goshawk, Cooper's, and the Sharp-Shinned—while the rest are numbered among the best friends of the fruit-grower and farmer."



From col. Chi. Acad. Sciences.

SOUTH AMERICAN RHEA.
 $\frac{1}{2}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE OSTRICH.

SOUTH AMERICAN Rhea is the name by which this immense bird is known to science. It is a native of South America, and is especially numerous along the river Plata. Usually seen in pairs, it sometimes associates in flocks of twenty or thirty, and even more have been seen together. Like all the members of the family, it is a swift-footed and wary bird, but possesses so little presence of mind that it becomes confused when threatened with danger, runs aimlessly first in one direction and then in another, thus giving time for the hunter to come up and shoot it, or bring it to the ground with his bolas—a terrible weapon, consisting of a cord with a heavy ball at each end, which is flung at the bird, and winds around its neck and legs so as to entangle it.

For our knowledge of the Rhea and its habits, we are chiefly indebted to Mr. Darwin, and we shall use his language in this account of the bird. He says it is found also in Paraguay, but is not common. The birds generally prefer running against the wind, yet, at the instant, they expand their wings and, like a vessel, make all sail. "On one fine hot day I saw several Ostriches enter a bed of tall rocks, where they squatted concealed till nearly approached."

It is not generally known that Ostriches readily take to the water. Mr. King says that at Patagonia and at Pont Valdez he saw these birds swimming several times from island to island. They ran into the water both when driven down to a point, and likewise of their own accord, when not frightened.

Natives readily distinguish, even at a distance, the male bird from the female. The former is larger and darker colored, and has a larger head. It emits a singular deep-toned hissing note. Darwin,

when he first heard it, thought it was made by some wild beast. It is such a sound that one cannot tell whence it comes, nor from how far distant.

"When we were at Bahia Blanca, in the months of September and October, the eggs of the Rhea were found in extraordinary numbers all over the country. They either lie scattered singly, in which case they are never hatched, or they are collected together into a hollow excavation which forms the nest. Out of the four nests which I saw, three contained twenty-two eggs each, and the fourth twenty-seven. The Gauchos unanimously affirm, and there is no reason to doubt their statement, that the male bird alone hatches the eggs, and that he for some time afterward, accompanies the young. The cock while in the nest lies very close; I have myself almost ridden over one. It is asserted that at such times they are occasionally fierce, and even dangerous, and that they have been known to attack a man on horseback, trying to kick and leap on him."

The skylight in the roof of the apartment in which two Ostriches were kept in the Garden of Plants, Paris, having been broken, the glaziers were sent to repair it, and in the course of their work let fall a piece of glass. Not long after this the female Ostrich was taken ill, and died after an hour or two in great agony. The body was opened, and the throat and stomach were found to have been dreadfully cut by the sharp corners of the glass which she had swallowed. From the moment his companion died the male bird had no rest; he appeared to be continually searching for something, and daily wasted away. He was removed from the spot, in the hope that he would forget his grief; he was even allowed more liberty, but in vain, and at length he mourned himself to death.

THE SOUTH AMERICAN RHEA.

I need'nt tell you I'm an Ostrich, for my picture speaks for itself. I'm a native of South America, but members of my family have been caught and taken to the United States, so you have seen some of them, probably, in a "Zoo."

We are swift-footed and wary birds, but unfortunately have no presence of mind, so that when danger threatens us we become confused, run this way and that way, till the hunter comes up and with gun or "bolas" brings us to the ground.

If your legs and neck were as long as mine, and an Indian should fling around you a cord with a ball at each end and get your legs all tangled up, wouldn't you tumble to the ground, too? Of course you would. That is the way they catch us with a "bolas."

I think we ought to be called "ship of the desert" as well as the camel, for when the wind blows, we expand our great wings, and running against it, like a vessel under full sail, go skimming along, happy as a bird, in truth.

You can never see us do that unless you come to South America. In captivity we act differently, you know. Maybe you have seen us, when in an

inclosure, holding our wings from our bodies and running up and down as though we were being chased, appearing greatly alarmed. Well, that is all fun. We have to do something to while the time away. Then, too, that is as near as we can come to "sailing" as we did when wild and free.

You have heard so much about the mother-bird sitting on the nest, that I am sure you will be interested in seeing a *father* who broods the eggs and hatches out the little ones. I have five wives. They all lay their eggs in one and the same nest, which is a hollow pit scraped out by their feet, the earth heaped up around to form a sort of wall. They lay the eggs, I have said, sometimes thirty in a nest, and I—well, I do the rest.

We are dangerous fellows if disturbed when brooding; have been known to attack a man on horseback, trying to kick and leap on him. Our kick is no love-tap, let me tell you, but being so powerful we can easily kill a man.

When startled, or angry, we utter a kind of grunt as a warning; if it is not heeded, we then hiss sharply, draw back our head, and get ready to strike.



From col. Chi. Acad. Sciences.

BAY BREASTED WARBLER.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE BAY-BREASTED WARBLER.

ABOUT sixty species of Warblers are known to ornithologists, no one of which can be considered a great singer, but their several twitterings have a small family resemblance. The Bay-breasted, which is also popularly called Autumnal Warbler, breeds from northern New England and northern Michigan northward, its nest being found in low, swampy woods, where there is a mixture of evergreens, oak, birch, elm and other trees. It is compact, cup-shaped, and usually placed in coniferous trees from five to fifteen or even twenty feet above the ground. Fine shreds of bark, small twigs, fibrous roots, and pine hair are used in its construction. Four eggs are laid, which are white, with a bluish tinge, finely speckled on or round the larger end with reddish-brown.

Comparatively little is known of the habits of this species. It passes in spring and fall, on its way to the north, being sometimes abundant at both seasons, but does not tarry long. In general habits, at all times, it closely resembles other species of the genus. In Oxford County, Maine, says Mr. Maynard, these birds are found in all the wooded sections of that region, where they frequent the

tops of tall trees. The species seems to be confined during the building season to the region just north of the White Mountains range.

Ridgway says: "Tanagers are splendid; Humming-birds are refulgent; other kinds are brilliant, gaudy or magnificent, but Warblers alone are pretty in the proper and full sense of that term. When the apple trees bloom, the Warblers revel among the flowers, vying in activity and in number with the bees; now probing the recesses of a blossom for an insect which has effected lodgment there, then darting to another, where, poised daintily upon a slender twig, or suspended from it, he explores hastily but carefully for another morsel. Every movement is the personification of nervous activity, as if the time for their journey was short; and, indeed, such appears to be the case, for two or three days at most suffice some species in a single locality; a day spent in gleaning through the woods and orchards of one neighborhood, with occasional brief siestas among the leafy bowers, then the following night in continuous flight toward its northern destination, is probably the history of every individual of the moving throng."

"Have you walked beneath the blossoms in the spring?

In the spring?

Beneath the apple blossoms in the spring?

When the pink cascades are falling,

And the silver brooklets bawling,

And the Warbler bird soft calling,

In the spring?"

BIRD SUPERSTITIONS AND WINGED PORTENTS.

THE superstitions of the peasant folk of any country are not only interesting with thought, feeling, and belief, says an intelligent writer, but through them much of the inner history of a people can often be traced. Ireland is peculiarly rich in these forgivable vagaries about birds. They often seem of a very savage and grewsome character, but as we come to know that however grim-visaged the face of one confiding the weird assertion of uncanny belief, that secretly the masses of the peasantry scout and flout them all, save those of a tender and winsome character, we become reconciled to it. Thus the quaint and weird things which might seem unaccountable and often repulsive to us, have become, in lieu of book lore, a folk and fireside lore, out of which endless entertainment is secured ; and underneath much of this there is a deep and earnest tenderness, such as all hearts know, for many things without apparent reason, that grow into life and ancestry, oft repeated homeside tale, beloved custom and that mysterious hallowing which comes upon changeless places and objects to men.

Here are a few bird superstitions : If an Osprey be shot along any coast, all the herring and mackerel will immediately disappear. If the Hen-harrier, which only hunts by twilight, is missed from its accustomed raptorial haunt, some evil spirit is said to be hovering about the locality. When Water-ousels appear in the spring time in unusual numbers in any unfrequented locality, it is a sign of abundance of fresh-water fish, but also a token of the approach of malignant disease. On the west coast in the early spring the poor fisherman watches early and late for the Gannet. He calls it the Solan, or Swift-flying Goose. If

it does not come his heart sinks, for there will be no luck at fishing ; but if great numbers wheel about the headlands of the coast, plenty will smile in his cabin home that year. Great numbers of Jay or Missel Thrushes feeding upon the berries of the hawthorn betoken the approach of a very cold winter, and their Grackle-like calls bring fear to the heart if the meal be low and the peat be scant in the little tenants cabin. When the nest of the Thrush or Mavis is built unusually high in the thorn-bush, this betokens a great calamity to a neighborhood, for some distressing disturbance is under way among the fairies, who in happy or friendly mood always see to it that these nests are built near their haunts in the grasses, that they may more readily enjoy the music of the thrush's songs. The crops of sweet singing Blackbirds are supposed to hold the souls of those in purgatory until the judgment day ; and whenever the Blackbird's notes are particularly shrill, these parched and burning souls are imploring for rain, which never fails of coming in response to the bird cries for their relief. The Wicklow mountains are notably the haunts of the Ring-Ousel or Mountain Stars. Whenever, after singing his fine deep song, he hesitates for a time, and then is heard to utter a loud, shrill and prolonged whistle, that night every human that has heard it will remain behind barred doors ; for that is a true fairy call, and the "wea folk of Wicklow" are sure to congregate in the moonlit mountain hollows and "dance rings round their swate selves" until dawn. Of course none of these dire calamities ever occur, but the simple-minded folk continue to have faith in them, and the innocent birds remain the supposed precursors of the, to them, mysterious misinterpreted operations of nature.



From col. Chi. Acad. Sciences.

BLACK-NECKED STILT.
 $\frac{1}{2}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE BLACK-NECKED STILT.

STILT would be a peculiarly appropriate name for this bird, with its excessively long legs, were it less graceful and dignified in its walk, moving on land with easy and measured tread, not in a "tremulous manner," says Col. Goss, as stated by some writers.

The Stilt is an inhabitant of temperate North America, from New Brunswick, Maine, Minnesota and Oregon southward; south in winter to Peru, Brazil, and West Indies. It is rare in the middle and western provinces, except Florida, also along the Pacific coast; breeding in suitable localities and in abundance in western Texas, southern Colorado, Utah, eastern Colorado, and southern Oregon. Extensive as is the range of the Stilt, we wonder how many of our readers have ever had the pleasure of seeing even a picture of one. The specimen depicted in *BIRDS* is regarded by experts as about as nearly perfect as art can produce. It will be observed that the eyes are alive in expression, as, indeed, are those of all our specimens that have appeared in recent numbers.

This slender wader inhabits the shores of bays, ponds, and swales where scantily covered with short grasses. It swims buoyantly and gracefully, and on land runs swiftly, with partially raised wings, readily tacking or stopping in its chase after insect life. Its flight, says Goss, is not very swift, but strong and steady, with sweeping strokes, legs fully extended and head partially drawn back, after the manner of the Avocet, (see *BIRDS*, Vol. II, p. 15), and like the latter, will often meet one a long distance from its nest, scolding and threatening. At such times its legs are as fully extended as its legs, the latter often dangling as it retreats.

The food of the Black-necked Stilt consists of insects, minute shell fish and larvae, and various small forms of life. The birds are social, usually living and breeding in small flocks.

The nests of these birds—when placed on dry, sandy land—are slight depressions worked out to fit the body; on wet lands they are upon bunches or masses of vegetation. Eggs three or four, buff to brownish-olive, irregularly but rather thickly splashed and spotted with blackish brown.

THE ENGLISH SPARROW.

WHEN the English Sparrow (see *BIRDS*, Vol. II, p. 208), was first introduced into Canada, we are informed by Mr. Albert Webber, the city of Hamilton provided for its protection by causing to be erected a large iron pole, on which was set a huge box containing many apartments, the pole surrounded by a circular iron railing. Each day during the winter a sheaf of oats was attached to the pole. In a year or two the Sparrows became so numerous that the authorities were obliged to abandon the project of contributing to the support of the birds

and left them to shift for themselves. They soon found, however, that the little foreigners were quite independent of the city fathers.

Indefatigable, persistent, industrious breeders—at once rebuilding their nests, if destroyed by accident or otherwise—there is little hope of their extermination, if such action should be desired in the future. Mr. Thomas Goodearl, an observer of these birds in their nativity, predicts that the English Sparrow will be the survivor—though not the fittest—of all English birds.

C. C. M.

PIN-TIAL DUCK.

It was my cousin the TEAL who said he was not born to sing and look pretty flitting among the trees, but was a useful bird, born to be "done brown" and look pretty in a dish. Well, I am one of that kind, too.

Pin-tail, Sprig-tail, Sharp-tail, Water Pheasant. I am known by all of these names, though people only use one at a time, I believe.

You will find us Pin-tails generally in fresh water. We move in very large flocks, in company with our cousins the Mallards, feeding and traveling with them for days. But when it comes to flying we distance them everytime. Our flight is rapid and graceful, the most graceful, they say, of all the Duck tribe.

Instead of a song we have a call note, a low plaintive whistle which we repeat two or three times. It is easily imitated, and often, thinking a companion calls us, we swim in the direction of the sound, when "bang" goes a gun and over flops one or more *Pin-tails*.

We have other enemies beside man, and have to keep a sharp lookout all the time. Way up north one day, a Fox stood on the borders of a lake and watched a flock of Ducks feeding among the rushes. He was very

hungry and the sight of them made his mouth water.

"How can I get one of those fine, fat fellows for my dinner," he muttered, and Mr. Fox, who is very cunning, you know, remained very quiet, while he thought, and thought, and thought.

"Oh, I have it!" he presently exclaimed, and going to the windward of the Ducks, set afloat a lot of dead rushes or grass, which drifted among the flock, causing no alarm or suspicion whatever.

Then Mr. Fox, taking a bunch of grass in his mouth, slipped into the lake, and with nothing but the tips of his ears and nose above the water, drifted down among the rushes and the Ducks, too.

Such a squawking as there was, when Mr. Fox opened his red mouth, seized the largest of the flock, and with a chuckle put back for the shore.

"Hm!" said he, after enjoying his dinner, "what stupid things Ducks are to be sure."

A mean trick, wasn't it? Nobody but a Fox—or a man—would have thought of such a thing. I'd rather be an innocent Duck than either of them though my name is *Pin-tail*. Wouldn't you?



From col. Chi. Acad. Sciences.

PIN-TAIL DUCK.
 $\frac{1}{2}$ Life-size.

Copyright
by
Nature Study Pub. Co., 1898, Chicago.

THE PINTAIL DUCK.

ALL the Ducks are interesting, and few species of the feathered creation, in shape, color, beauty, and general variety of appearance present more that is attractive to the student of ornithology. Aside from their utility as destroyers of much that is obnoxious to vegetation and useful animal life, and as a desirable, if not indispensable, food for man, they possess characteristics that render them interesting and instructive subjects for investigation and study.

Among them this widely distributed fresh water Duck is one of the best known. Its name describes it well. It is one of the first arrivals in the spring. The Pintail haunts wet prairies, mud flats, and the edges of reedy, grassy waters, feeding largely upon bulbous roots, tender shoots, insects and their larvae, worms and snails, and, on its return in the fall, upon various seeds, water plants, and grain. Acorns have been frequently taken from the crops of these Ducks.

The Pintail, according to Goss, seldom dives, and it never does so while feeding, but in searching in the water for its food immerses not only the head but a large portion of the body. It is an odd sight to see a flock thus tipped up and working their feet in the air, as if trying to stand upon their heads. They move about with a graceful motion of the head, and with tail partially erect, and upon the land step off with a dignity of carriage as if impressed with the thought that they are no common Duck. In flight they are very swift.

The nest of the Pintail is placed

on low but dry, grassy land and not far from water, usually under the shelter of a bush, and is a mere depression in the ground, lined with grasses and down. There are from seven to eggs ten, of pale green to olive buff, in form oval and ovate.

The habitat of the Pintail Duck is the northern hemisphere in general; in North America it breeds from the northern United States northward to Iceland and south in winter to Cuba and Panama.

Mr. George Northrup, of long experience on Calumet lake and river, Illinois, says that only a few years ago there were to be seen on these waters during the seasons of migration as many as a million, perhaps millions, of Ducks, among which were multitudes of Pintails. He has seen the lake so covered with them that there seemed to be no room whatever for more, though others continued to alight. The hunters were delighted with the great opportunities these vast flocks presented for slaughter—sport, as they called it; mania, Mr. Northrup characterized it. He said the birds, at the very earliest indication of day, hurried on swift wing to their feeding grounds to get their breakfasts, where the sportsmen were usually awaiting them.

The Pintail Duck is not regarded as so great a delicacy as the Canvasback, the Red Head, or even the Mallard, yet when fat, young, and tender it is a very palatable bird, and well esteemed for its flavor. The cook probably has something to do with its acceptableness when served, for

No Duck is bad when appetite
Waits on digestion.

FEATHERS OR FLOWERS?

AS the question which confronted the fair sex this year when about to select their Easter hats or bonnets.

"Say flowers," pleaded the members of the Audubon Society, and from the many fair heads, innocent of feather adornment, which bowed before the lily-decked altars on Easter morning, one must believe that the plea was heeded.

Nearly every large house in Chicago, dealing wholly or in part in millinery goods, was visited by a member of the Audubon Society, says the *Tribune*. One man who sells nothing but millinery declared that the bird protective association was nothing but a fad, and that it would soon be dead. He further said he would sell anything for hat trimming, be it flesh, fish, or fowl, that a *woman would wear*.

Touching the question whether the beautiful Terns and Gulls, with their soft gray and white coloring, were to be popular, it was said that they would not be used as much as formerly. One salesman said that he would try, where a white bird was requested, to get the purchaser to accept a domestic Pigeon, which was just as beautiful as the sea and lake birds named.

The milliners all agree that the Snowy Egret is doomed to extermination within a short time, its plumes, so fairy-like in texture, rendering its use for trimming as desirable in summer as in winter.

As to the birds of prey, people interested in our feathered friends are as desirous of saving them from destruction as they are to shield the song birds. There are only a few of the Hawks and Owls which are injurious, most of them in fact being

beneficial. Hundreds of thousands of these birds were killed for fashion's sake last fall, so that this coming season the farmer will note the absence of these birds by the increased number of rat, mouse, and rabbit pests with which he will have to deal.

It is a matter of congratulation, then, to the members of the Audubon Society to know that their efforts in Chicago have not been wholly fruitless, inasmuch as the majority of dealers in women's headgear are willing to confess that they have felt the effect of the bird protective crusade.

Dr. H. M. Wharton, pastor of Brantly Baptist Church, Baltimore, has always been a bitter opponent of those who slaughter birds for millinery purposes. "It is wholesale murder," said he, "and I am delighted that a bill is to be offered in the Maryland legislature for the protection of song birds. I have commented from the pulpit frequently upon the evil of women wearing birds' wings or bodies of birds on their hats, for I have long considered it a cruel custom."

"Birds are our brothers and sisters," said the Rev. Hugh O. Pentecost before the Unity Congregation at Carnegie Music Hall, Pittsburg, a few weeks ago. "If we are children of God, so are they. The same intelligence, life, and love that is in us is in them. The difference between us is not in kind, but in degree."

"How is this murderous vanity of women to be overcome?" asks *Our Animal Friends*. "We confess we do not know; but this we do know, that good women can make such displays of vanity disreputable, and that good women *ought to do it*."

THE DOUBLE YELLOW-HEADED PARROT.

HERE we have a picture of the best, with possibly one exception, the African Gray, of the talking parrots.

Its home is in Mexico, about the wooded bottoms of La Cruz river, in the province of Taumaulipas, on the east coast. It is a wild, picturesque region of swamps, jungles, and savannahs, with here and there a solitary hacienda or farm-house, where three hundred or four hundred persons are at work in the fertile soil. Here, three hundred miles south of Matamoras, the nearest American settlement, is the spot where your pet Parrot, says an exchange, probably first opened its eyes to the light of day stealing through the branches of the ebony and coma trees, amid surroundings that might to an imaginary Polly suggest the first dawn of creation. The forests in this region abound in all kinds of birds in rich plumage. Parrakeets are so abundant that what with the screeching and cawing of the Parrots it is sometimes impossible to hear one's own voice. Hunters do not trouble themselves to secure them, however, as they are not worth carrying to market. There is apparently a profit only in the Double Yellow-head, for which the hunters get as much as \$20.00. There are two kinds of Mexican Parrots, both of which are held in far different esteem. The only Mexican Parrot that is in general demand as a talking pet is the Double Yellow-head, which with age develops a yellow hood that extends completely over its head and shoulders. In connection with the "speaking" of Parrots, one of the most curious circumstances is that recorded by Humboldt, who in South America met with a venerable bird which remained the sole possessor of a literally dead lan-

guage, the whole tribe of Indians who alone had spoken it having become extinct.

The Parrot builds no nest. The female selects a deep hollow in the highest tree trunk and there lays two eggs. This occurs about the first of May. The young are hatched about the 15th of June, ten days elapse before they can open their eyes, and several weeks must be allowed for the young birds to outgrow their squab state and gain sufficient strength to be removed from the care of their parents. The Parrot is a wily and wise bird. It lays its eggs safely out of reach of ordinary danger and takes good care not to betray their whereabouts. When the young birds are hatched they are fed twice a day by their elders, early in the morning and again about the close of day. The birds in feeding their young give vent to a series of contented clucks and chuckles, which is answered by the young ones. These birds live on mangoes and the nuts of the ebony tree.

Newton observes, that considering the abundance of Parrots both as species and individuals, it is surprising how little is known of their habits in a wild state.

It is probable that no other bird has been more admired or more thoroughly execrated. If it is good natured, is an interesting talker, and you happen to be in a mood to listen to it with some pleasure, you will speak favorably of the bird, saying to it: "Pretty Polly! pretty Polly!" but should your nerves be unstrung and every noise a source of irritation, the rasping, high-pitched screech of a Parrot, which is a nuisance in any neighborhood, will be beyond endurance. We shall always be satisfied with the possession of Polly's picture as she was.

THE DOUBLE YELLOW-HEADED PARROT.

I came from Mexico. Once I talked Spanish, but at the present time I speak the English language altogether. Lucky, isn't it? My neck might be wrung did I cry "*Viva Espana!*" just now.

The reason why I spoke Spanish in Mexico was because I boarded with a Spaniard there; now I live in the United States and make my home with an American family. As I only repeat what I hear I must, of course, talk just as they do.

I was born, however, in the finest Parrot country in the world. My mother built her nest in a deep hollow in the highest tree trunk in a swamp or jungle, and there laid just two eggs. She was wise to choose a high tree, for there she thought her nest was out of danger.

When we were hatched, my brother and I, our parents fed us only twice a day, in the early morning and late evening. Two meals a day was enough for little babies, my mother said.

Well, maybe it was, but in our case it would have been better had she not fed us at all. You see the Parrot hunters were about, and as my parents always kept up such a loud "clucking" when feeding us, and we did the same, why, the hunters found out in which tall tree we lived.

It was easy then for a "peon" or poor Mexican to climb the tree, and so all of our family were made prisoners. Being Double Yellow-headed Parrots we were very valuable because we can talk. My master paid \$20.00 for me.

The gentleman who owns me now sells tickets in a theatre. My cage hangs near the window, and I used to hear him say when there was a rush to buy tickets, "One at a time, gentlemen; one at a time, please!" I hadn't learned to speak English very well, then, but I heard the sentence so often that I stored it up for future use.

My master, one day, went to the country and took me with him. The sight of the trees made me think of my old home, so I escaped from the cage and flew off to the woods.

They searched for me all day but not till nightfall did they find me. Such a sorry looking bird as I was, sitting far out on the end of a limb of a tree, with my back humped, and half the gay feathers plucked out of me. Around me were a flock of Crows, picking at me whenever they got a chance.

"One at a time, gentlemen," I kept saying, hitching along the limb, "one at a time, please;" but instead of tickets they each got a feather.



From col. Chi. Acad. Sciences.

CHICAGO COLORTYPE CO., CHIC. & NEW YORK.

DOUBLE YELLOW-HEADED PARROT.

$\frac{1}{2}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

SPRING THOUGHTS.

AND now there is such a fiddling in the woods, such a viol creaking of bough on bough that you would think music was being born again as in the days of Orpheus. Orpheus and Apollo are certainly there taking lessons; aye, and the Jay and Blackbird, too, learn now where they stole their "thunder." They are perforce, silent, meditating new strains.

* * * *

Methinks I would share every creature's suffering for the sake of its experience and joy. The Song Sparrow and the transient Fox-colored Sparrow, have they brought me no message this year? Is not the coming of the Fox-colored Sparrow something more earnest and significant than I have dreamed of? Have I heard what this tiny passenger has to say while it flits thus from tree to tree? God did not make this world in jest, no, nor in indifference. These migratory Sparrows all bear messages that concern my life. I love the birds and beasts because they are mythologically in earnest. I see the Sparrow chirps, and flits, and sings adequately to the great design of the universe, that man does not communicate with it, understand its language, because he is not alone with nature. I reproach myself because I have regarded with indifference the passage of the birds. I have thought them no better than I.

* * * *

I hear the note of a Bobolink concealed in the top of an apple tree behind me. Though this bird's full strain is ordinarily somewhat trivial, this one appears to be meditating a strain as yet unheard in meadow or orchard. He is just touching the strings of his theorbo, his glassichord, his water organ, and one or two notes globe themselves and fall in liquid bubbles from his tuning throat. It is as if he touched his harp within a vase of liquid melody, and when he lifted it out the notes fell like bubbles from the trembling strings. Methinks they are the most liquidly sweet and melodious sounds I ever heard. They are as refreshing to my ear as the first distant tinkling and gurgling of a rill to a thirsty man. Oh, never advance farther in your art; never let us hear your full strain, sir! But away he launches, and the meadow is all bespattered with melody. Its notes fall with the apple blossoms in the orchard. The very divinest part of his strain drops from his overflowing breast *singultim*, in globes of melody. It is the foretaste of such strains as never fell on mortal ears, to hear which we should rush to our doors and contribute all that we possess and are. Or it seemed as if in that vase full of melody some notes sphered themselves, and from time to time bubbled up to the surface, and were with difficulty repressed.

—Thoreau.

THE MAGNOLIA WARBLER.

IN this number of BIRDS we present two very interesting specimens of the family of Warblers, the Magnolia or Black and Yellow Warbler, ranking first in elegance. Its habitat is eastern North America as far west as the base of the Rocky Mountains. It breeds commonly in northern New England, New York, Michigan, and northward. According to Mr. William Brewster it is found everywhere common throughout the White Mountains of New Hampshire. Its favorite resorts are little clumps of firs and spruce shrubs, also willow thickets near streams and ponds and other damp places. "Its gay colors and sprightly song will at once attract the attention of even the casual observer. The nest is usually placed in the horizontal twigs of a fir or spruce at heights ranging from four to six feet, five being the average elevation, and the favorite localities are the edges of wood paths, clearings, or roads bordered by woods. Sometimes the nests are built in the tops of young hemlocks ten or fifteen feet up, or in the heart of the forest thirty-five feet above the ground." Mr. Brewster

describes the nest as loosely put together, of fine twigs, preferredly hemlock, coarse grasses and dry weed-stalks. The lining is fine black roots, closely resembling horse-hair. The eggs are four, very rarely five, of creamy white, spotted and blotched with various shades of reddish brown, hazel and chestnut. The markings are generally large and well defined and often form wreaths about the larger ends.

Ridgway mentions the Magnolia Warbler as "one of the most agile of its tribe, its quick and restless movements being more like those of the Redstart than those of its nearest kindred. The tail is carried somewhat elevated and widely expanded, to display the broad white band across the middle portion of the inner web of the feathers, which together with the bold contrasts of black, yellow, and blue-gray of the plumage, render it both conspicuous and beautiful."

Mr. Langille describes the song of the Magnolia Warbler as "a loud, clear whistle, which may be imitated by the syllables *chee-to, chee-to, chee-tee-ee*, uttered rapidly and ending in the falling inflection."

I CAN BUT SING.

"O little bird of restless wing,
Why dost thou sing so sweet and loud?
Why dost thou sing so strong and proud?
Why dost thou sing?"

"Oh I have drunk the wine of spring,
My mate hath built a nest with me:
My hope flames out in song," said he,
"I can but sing."



From col. Chi. Acad. Sciences

MAGNOLIA WARBLER.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

BIRDS PAIRING IN SPRING.

TO the deep woods
They haste away, all as their fancy leads,
Pleasure, or food, or secret safety prompts;
That nature's great command may be obeyed,
Nor all the sweet sensations they perceive
Indulged in vain. Some to the holly hedge
Nestling, repair, and to the thicket, some;
Some to the rude protection of the thorn
Commit their feeble offspring; the cleft tree
Offers its kind concealment to a few,
Their food its insects, and its moss their nests;
Others apart, far in the grassy dale
Or roughening waste their humble texture weave;
But most in woodland solitudes delight,
In unfrequented glooms or shaggy banks,
Steep, and divided by a babbling brook,
Whose murmurs soothe them all the livelong day,
When by kind duty fixed. Among the roots
Of hazel pendent o'er the plaintive stream,
They frame the first foundation of their domes,
Dry sprigs of trees, in artful fabric laid,
And bound with clay together. Now 'tis nought
But restless hurry through the busy air,
Beat by unnumbered wings. The swallow sweeps
The slimy pool, to build his hanging house
Intent; and often from the careless back
Of herds and flocks a thousand tugging bills
Steal hair and wool; and oft when unobserved,
Pluck from the barn a straw; till soft and warm,
Clean and complete, their habitation grows.
As thus the patient dam assiduous sits,
Not to be tempted from her tender task
Or by sharp hunger or by smooth delight,
Though the whole loosened spring around her blows,
Her sympathizing lover takes his stand
High on the opponent bank, and ceaseless sings
The tedious time away; or else supplies
Her place a moment, while she suddenly flits
To pick the scanty meal.

—James Thomson.

THE GREAT BLUE HERON.

Grotesque and tall, he stands erect,
Where the reed-rifle swirls and gleams.
Grave, melancholy, circumspect—
A hermit of the streams.—ERNEST MCGAFFEY.

ERRONEOUSLY called Sandhill Crane or Blue Crane, by which names it is better known than by its proper name, this bird is well known as one of the most characteristic of North America, breeding, as it does, singly and in colonies from the Arctic regions southward to the West Indies and South America. In the warmer parts of the country it breeds in vast heronries in company with other species of Herons, of which there are eleven or twelve, to which places they resort year after year. It is a common bird, except in localities far removed from streams or ponds which furnish its food supply.

This solitary and wary bird is usually seen standing in shallow water, often in mid-stream, but it requires great caution and skill on the part of the person who would observe its movements to get a view of him, as he usually first sees the intruder, and startles him by his harsh squawking cries as he flies from his feeding place.

The nests are placed in trees along rivers, usually the largest. They are bulky structures of sticks on the highest branches, a dozen or more nests sometimes being built in one tree. In localities destitute of trees the nests are built on rocks. Sycamore trees are favorite resorts of these birds, the light color of the limbs and the peculiar tint of the foliage harmonizing so well with their plumage as to render their presence difficult of detection.

The Heron's food consists of fishes, frogs, crawfish, and the like, large quantities of which must be sacrificed to appease its voracious appetite, as

many as ten good-sized fishes having been disgorged at one time by a Heron that was in haste to get away, a happy provision of nature which often enables this family of birds to escape from the squirrel hunters and irresponsible gun-carriers.

The eggs of this species are plain greenish-blue and three or four in number. The young are without plumes, which develop gradually with maturity.

Dr. Neill mentions a curious instance of the Heron feeding on young Water-hens. A large old willow tree has fallen down into the pond, and at the extremity, which is partly sunk in the sludge and continues to vegetate, Water-hens breed. The old male Heron swims out to the nest and takes the young if he can. He has to swim ten or twelve feet, where the water is between two and three feet deep. His motion through the water is slow, but his carriage stately. He has been seen to fell a rat at one blow on the back of the head, when the rat was munching at his dish of fish.

While the Heron stands on the water's edge, it remains still as if carved out of rock, with its neck retracted, and its head resting between the shoulders. In this attitude its sober plumage and total stillness render it very inconspicuous, and as it prefers to stand under the shadow of a tree, bush, or bank, it cannot be seen except by a practiced eye, in spite of its large size.

The flight of the Heron is grand and stately. The head, body, and legs are held in a line, stiff and immovable, and the gently waving wings carry the bird through the air with a rapidity that seems the effect of magic.



From col. Chi. Acad. Sciences.

GREAT BLUE HERON.
1 5 Life-size.

Copyright by
Nature Study Pub. Co., 1898. Chicago.

THE GREAT BLUE HERON.

I belong to a family that is fast disappearing, simply because my plumes are pretty. The ladies must have them to trim their hats and bonnets, so the plume hunters visit our "rookeries" when our mates are on their nest, and kill hundreds and hundreds of us.

Our nests are great flat, bulky affairs, made of sticks and lined with grasses. We build them in high trees along the rivers, or way back in the swamps, a dozen or more in one tree.

We "go fishing" every day; but not for sport as you boys do. No, indeed, we must get a catch or go hungry. Our long bills are better than a hook and line, and our long legs enable us to wade in the water without getting our clothes—feathers, I mean,—wet. Fish, frogs, and crawfish make up our diet, and as we have very healthy appetites it takes a great many of them to make a meal.

Like some other birds I have more than one name. *Blue Crane*, *Little Blue*, *Little Crane*, *Skimmer*, and *Scissorsbill*. Some people call me "gawky." Is that a name, too?

To see us standing on one foot, by the margin of a stream, the very picture of loneliness, you

would little imagine what gay birds we are just before the mating season in the spring.

In order to show off our best points before the lady-birds, off we all go to some secluded spot, form a circle or ring, in which each male bird in turn performs his showing off act. We skip, flap our wings, curve our necks, and prance around, the lady-birds expressing their approval by deep croaks, something like a bull-frog's, while the envious cocks keep up a running fire of remarks in the rasping tones of a horse-fiddle.

Each performer when his act is done, resumes his place in the circle, and so it goes on, till every male has displayed his accomplishments and good looks before the lady-birds. Then we return to our feeding grounds, and nose around in the water for our supper.

It does sound odd to hear a bird of my size talk about flying, doesn't it? But in truth my body is very light, weighing between four and five pounds. I am long from bill to tail, and my wings are very long and curving.

My legs? Oh that is a matter I dislike to talk about. They certainly speak for themselves.

A FOSTER BROTHER'S KINDNESS.

A YOUNG Oriole was rescued from the water where it had evidently just fallen from the nest. When taken home it proved a ready pet and was given full freedom of the place. Some weeks later a nestling from another brood was placed in the same cage with the other. The new-comer had not yet learned to feed himself, and like a baby as it was, cried incessantly for food. The first captive though but a fledgling himself, proceeded to feed the orphan with all the tender solicitude of a parent.

"It was irresistably cunning and heartsome, too," says the narrator, W. L. Dawson, in the *Bulletin*, "to see the bird select with thoughtful kindness, a morsel of food and hop over toward the clamoring stranger and drop it in his mouth, looking at it afterward with an air as much as to say, 'there, baby, how did you like that?' This trait was not shown by a chance exhibition, but became a regular habit, and was still followed when the older bird had attained to fly catching. It upset all ones notions about instinct and made one think of a Golden Rule for birds."

A GOOSE THAT TAKES A HEN SAILING.

The following remarkable instance of the communication of ideas among the lower animals is narrated by the Rev. C. Otway :

"At the flour mills of Tubberakeena, near Clonmel, while in the possession of the late Mr. Newbold, there was a Goose, which by some accident was left solitary, without mate or offspring, gander or goslings. Now it happened, as is common, that the miller's wife had set a number of Duck eggs under a hen, which in due time were incubated ; and of course the ducklings, as soon as they came forth, ran with natural instinct to the water, and the hen was in a sad pucker—her maternity urging her to follow the brood, and her instinct disposing her to keep on dry land.

"In the meanwhile, up sailed the Goose, and with a noisy gabble, which certainly (being interpreted) meant, 'Leave them to my care,' she swam up and down with the ducklings, and

when they were tired with their aquatic excursion, she consigned them to the care of the hen.

"The next morning, down came again the ducklings to the pond, and there was the Goose waiting for them, and there stood the hen in her great flustration. On this occasion we are not at all sure that the Goose invited the hen, observing her maternal trouble ; but it is a fact that she being near the shore, the hen jumped on her back, and there sat, the ducklings swimming and the Goose and hen after them, up and down the pond.

"This was not a solitary event ; day after day the hen was seen on board the Goose, attending the ducklings up and down, in perfect contentedness and good humor—numbers of people coming to witness the circumstance, which continued until the ducklings, coming to days of discretion, required no longer the joint guardianship of the Goose and Hen."—*Witness*.



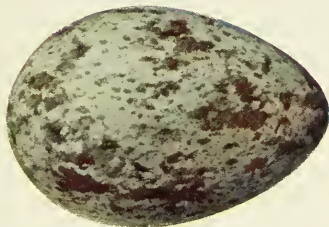
1



2



3



4



5



6



7



8



9



10



11



12



13

From col. Chi. Acad. Sciences.

EGGS.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

1. Great Crested Fly-catcher. 2. King Bird. 3. Night Hawk. 4. Crow. 5. Red-headed Woodpecker 6. Yellow-billed Cuckoo. 7. Audubon's Caracara. 8. Black-billed Magpie. 9. Kingfisher. 10. Screech Owl. 11. Turkey Vulture. 12. Gambel's Partridge. 13. Bob White.

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

Under the eaves in an old tin pot,
Six little birds lie in a nest;
The mother bird broods them with her wings,
And her downy-feathered breast.
With "coos" and "chirps" she tells her love
As human mothers do,
Says "tootsy, wootsy, mammy's dove,
And papa's tootsy, too."

Pierre gazed after Bridget with a perplexed look.

"A-a-what?" he inquired: "I never heard that word before."

"Oh, you did'nt," returned Henry with a wise air, "if I'm not mistaken a Hornithologist has reference to a Horned Owl. Has it not, Mama?"

"It might if there were such a word," she replied, with a laugh. "Bridget meant an Ornithologist, the scientific name for students of birds and their ways. But come, Mrs. Wren shows signs of uneasiness; we must not disturb her again to-day."

"I'm truly glad they are gone," said Mrs. Wren, as her spouse flew over to the tin pot. "It makes me very nervous when they all stand about and stare at me so."

"Of course it does," sympathizingly replied Mr. Wren, "but now, let me get another peep at the little darling. My, what a lovely little creature it is?" and Mr. Wren whisked his tail and chirped to the baby in a truly papa-like fashion.

"And to think that moon-faced Bridget said it was the 'skinniest, ugliest little baste she iver saw'," indignantly returned Mrs. Wren, mimicking Bridget's brogue to perfec-

tion. "The precious little thing?" turning the birdling over with her bill, "why, he is the very image of his father."

"Do you think so?" a little doubtfully, "It seems to me that—that——"

"Oh, you will see when his hair, or rather feathers grow out and his lovely black eyes open. Just look at his dear little tootsy-wootsy's," kissing the long scrawny toes, "my, how glad I am that the eldest is a boy. Little Dorothy will have a brother to protect her, you know."

"Don't count your chickens before they are hatched, my dear," warned Mr. Wren, never forgetful of the many dangers surrounding a nest full of eggs, or young birds. "Mr. Jay, or Mr. Owl, or Mr. Hawk, might yet pay us a visit and——"

"Or a collector might come along," said Mrs. Wren, "and carry off eggs, birdling, and all. Oh how that thought frightens me," and the poor little mother cowered deeper down in the nest uttering a plaintive, shuddering cry.

"There, there!" said Mr. Wren, caressing her with his bill, "time enough to cross the stream when we come to it. Our landlord will protect

his tenants, I am sure, so sit here and croon a lullaby to the baby while I go to market. I heard of a place yesterday where I can get some of those delicious thousand legs of which you are so fond. 'Ta, ta, love,' and away he flew, fully alive to the fact of another mouth in the home-nest to feed.

Every day for six, a little yellow bill pecked its way out of the shell, and every day a delighted and curious group of children peeked into the tin-pot at the nervous Mrs. Wren and her family.

"Their eyes look so big, and so do their mouths," she lamented after one of these visits. "I am always reminded of that story our landlady one afternoon told the children."

"What story?" tenderly inquired Mr. Wren.

"Of the wolf and Little Red Riding Hood. Ugh! imagine anything eating up our dear little Dorothy!" and Mrs. Wren stood on her feet, fluffed her feathers in a pretty motherly way and gathered her brood more closely under her.

Very little time, now, had Mr. Wren to spare for singing or flying about with his neighbors, so occupied were he and Mrs. Wren in providing food for their family.

"There is precious little fun in this sort of thing," growled he one day when paying a brief visit to Mr. John and his spouse. "One can never go near the nest but open fly six red mouths asking for food. Its peep, peep, peep, from morning till night; hurry, hurry, hurry, eat and bring up again; to cram, cram, cram down six

long, red throats the whole day long. There are some days," with a sigh, "when I really long to be a bachelor again."

"Oh, you do," said Mrs. John, with a meaning glance at her husband, "There are other fathers of families, I dare say, Mr. Wren, who, if they *dared* would say the same thing. But," smoothing her apron, "you have such a shiftless creature for a wife that I don't much wonder. Jenny, I presume, stays at home and lets you do all the fetching and carrying."

"Indeed," replied Mr. Wren, who wished he had not complained at all, "you are very much mistaken, Mrs. John. Jenny can find more grubs, worms, and beetles in one minute than I can in ten. She is always on the go, and seldom complains, though I must admit she does a deal of scolding."

"She wouldn't be a member of *our* family if she didn't," proudly said Mrs. John, "my mother——" but Mr. Wren, who had heard that story a score of times, suddenly remembered Mrs. Jenny would be expecting him at home, said "good-by" and hastily flew away.

Pierre, the first born, was now old enough to fly, but timidly stayed in the nest. Mrs. Wren noted with great anxiety that no sooner did she leave the tin-pot but up popped six little heads, and out upon a curious world gazed twelve little bead-like eyes.

"Do be good children while I am gone," she would entreat, when ready for market, "do keep your heads inside of the house. Pierre, put your head down in the nest instantly, do

you hear me!" and little Mrs. Wren would stand on the edge of the tin-pot and fussily cry *krap, up, up*, which in Wren language means, you naughty, naughty, birds.

"I think I am big enough to get out of here," said Pierre one day as he watched her fly away, "bugs and worms must taste a heap better fresh from the ground. I'm tired of baby-food, I am."

"So am I," piped Emmett, "you try your wings first, Pierre, and if you can fly I will come after."

"Well, here goes," said Pierre, poisoning himself on the rim of the pot as he had seen his parents do, "watch me, boys, watch me fly."

"Well, we are watching you," they chorused, as he spread his wings and flapped them a number of times, "why don't you go?"

"I—I—" stammered Pierre, "oh, there's a cat!" and into the pot he darted and down they all huddled like so many frightened mice.

Presently Bobbie raised his head and peeped out.

"I don't see any cat," said he, "and I don't believe you did, either, Pierre. You were only afraid to fly."

Pierre looked a little sheepish.

"If you fellows think it so easy, try it," was the mocking reply. "There is nobody here to hinder you."

"Well, I will," said Bobbie stoutly, and out he crawled onto the edge of the pot, spread his wings, and with one preparatory flap rose in the air and down he came with a frightened "peep" to the ground.

Bridget at this moment, broom in hand, came out upon the porch to do her daily sweeping.

"It's lucky for ye's, me darlint," said she, tenderly picking up the helpless bird, "that we do be havin' no cats for tinents on these premises, so it is. A purty soft thing ye's now are in your coat of feathers, and not an ugly little baste, at all, at all."

"It's quare," she continued, stroking the bird with her big red fingers, "what idees the innocent crather do be puttin' into me head for sure. Me hand, for insthance, and the wings ov this little bird! Two wonderful things, when wan comes to think of it, and very useful. It's sorra crathers we'd both be without 'em, wudn't we, birdie? There now," placing it in the pot, "take an owld woman's advice and don't ye's be so anxious after leavin' the home nest. Its many a hard arned dollar, so it is, that Bridget O'Flaherty wud give to get back to her own," and with visions before her humid eyes, of Old Ireland and the tumble-down cottage in which she was born, Bridget fell vigorously to sweeping.

(TO BE CONCLUDED.)

SUMMARY.

Page 166.

SOUTH AMERICAN RHEA.—*Rhea americana*. Other name: "Ostrich."

RANGE—Paraguay and southern Brazil through the State of La Plata to Patagonia.

NEST—In the ground, dug by the female with her feet.

EGGS—Twenty and upwards.

Page 170.

BAY-BREASTED WARBLER.—*Dendroica castanea*. Other name: "Autumnal Warbler."

RANGE—Eastern North America, westward to Hudson Bay; south in winter to Central America.

NEST—Of fine shreds of bark, small twigs, roots and, pine hair.

EGGS—Four, white, with bluish tinge, finely speckled on or round the larger end.

Page 174.

BLACK-NECKED STILT.—*Himantopus mexicanus*. Other names: "Lawyer," "Long Shanks," "Pink-Stockings."

RANGE—The whole of temperate North America, middle America, and northern South America, south to Peru and Brazil; West Indies in general, and Bermudas; north on the Atlantic coast to Maine. More generally distributed and more abundant in the western than in the eastern province.

NEST—Small sticks and roots, in the grass on the margin of a lake or river.

EGGS—Three or four, greenish-yellow.

Page 178.

PINTAIL.—*Dafila acuta*. Other names: Sprig-tail; Spike-tail; Pike-tail; Picket-tail; Pheasant Duck; Sea Pheasant; Water Pheasant; Long-neck.

RANGE—Nearly the entire northern hemisphere, breeding chiefly far northward, in North

America, migrating south in winter as far as Panama and Cuba.

NEST—In tall bunches of prairie grass, seldom far from water.

EGGS—Eight or nine, of a dull grayish olive.

Page 183.

DOUBLE YELLOW-HEADED PARROT.—*Conurus mexicanus*.

RANGE—Eastern coast of Mexico.

NEST—In holes of trees.

EGGS—Two.

Page 187.

MAGNOLIA WARBLER.—*Dendroica maculosa*. Other name: "Black and Yellow Warbler."

RANGE—Eastern North America, west to eastern base of Rocky Mountains; winters in Bahamas, Cuba (rare), eastern Mexico and Central America.

NEST—Loosely put together, of fine twigs, coarse grasses, and dry weed-stalks, lined with fine black roots resembling horse hair.

EGGS—Four, creamy white, spotted and blotched with various shades of reddish-brown, hazel and chestnut.

Page 191.

GREAT BLUE HERON.—*Ardea herodias*. Other names: "Sand-hill Crane;" "Blue Crane."

RANGE—The whole of North and middle America, excepting Arctic districts; north to Hudson's Bay, fur countries, and Sitka; south to Columbia, Venezuela; Bermudas, and throughout the West Indies.

NEST—In high trees along rivers, or in the depths of retired swamps.

EGGS—Commonly three or four, of a plain greenish blue.

BIRDS.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. III.

JUNE, 1898.

No. 6.

JUNE.

"What is so rare as a day in June?
Then, if ever, come perfect days."

YES, Lowell, in a few words, describes the month of June, or, at least, he indicates something of it. But, still, what are perfect days? We look for them in April, when the birds, many of them, certainly the most attractive of them, return from the south, and we find ourselves, when we visit the woods and parks, disappointed that the sun does not shine, that the air is not soft and balmy, and that the grass and leaves and buds do not show themselves in spring attire, for, on the contrary, we find winter lingering distressingly near, that the merry Warblers are silent, and that the "greenery of young Nature" is very slow to indicate her presence or even her early coming. We pull our wrappings about us and go home. April past, we then fancy that her older sister, May, beautiful in literary imagery—for do we not recall descriptive visions of May days of long ago, when the human blossoms danced about the May pole, lolled luxuriantly in the soft, tender grass, hid themselves in

the deep-leaved trees, and at last gratified our imaginations with the belief that she is altogether perfect? Unfortunately a chill takes possession of us and we return home disconsolate. May also has disappointed us. We have had an experience which we shall not forget. We have seen and recognized many birds, but they have not sung for us. They have been, as they almost always are, influenced by the elements. And why should they not be? They have but one suit of clothes. Have you observed the Robin in the early spring? He is worth watching. We watched a fine specimen in south Washington Park in March last. It was a comparatively mild day for the windy month. He perched on a lateral limb of a leafless tree a few yards from Sixtieth street. Whether he saw us or not we could not be sure, as he took little notice beyond saying *Toot-tut, toot-tut!* He ruffled his suit and seemed as fat as feathers could make him. They seemed as important to him as were buffalo robes to the sleighing parties of

a few days before. Still he was observant and seemed to be looking for stray food that would warm him up. We had some fresh crackers in our pocket, which we broke into fine fragments, and scattered, withdrawing several yards away. To our surprise, not only the Robin but several Nuthatches, some Brown Creepers, a number of English Sparrows, three or four Bluejays, and a gray Squirrel, (from whence he came I could not conceive, there being no large tree near in which he might have had a winter home) came with great promptitude to feed on the unexpected offering. Others, no doubt, have had this experience. Does it not suggest that the birds which remain with us the whole year round—finding, of course, during the spring, summer, and fall, sufficient for their wants,—should be looked after a little bit, if only that they may be permitted to escape from the sometime unusually severe storms of winter? Nature has provided them with ample feathery protection from her ordinary moods, but when she breaks out in icy blasts and snow that covers the very face of her they suffer and they perish.

But April, with its weather uncertainties—although it has long been said and believed that its showers bring May flowers—with its disappointments to all those who wish that the balm of mild breezes would come—longed for by the invalid and the convalescent, the lover of nature who would go forth to visit her and to court her, April seems a sort of humbug. And is May much better? How many days, “so calm, so sweet, so bright, the bridal of the earth and sky,” come in May? A few do come, and we remember them. But, as Lowell says, perfect days are rare, even in June, when, if ever, come “perfect

days.” We think that Lowell nevertheless lived a little too far north to entitle him to state, even poetically, that perfect days are only to be enjoyed in June. Had he, with the writer, lived in southern Ohio, on the Little Miami river, and gone fishing in the month of May, he would, we think, have changed his mind. Or had he read the little less than perfect poem of W. H. Venable, which, it may be, however, was written later than the verses of our, many think, greatest poet, “June on the Miami,” he might have put aside his books and his criticisms and his philosophy, and sought out the beautiful river of western history—then the sweetest stream that flowed in America, and even now, notwithstanding the giant sycamores have largely disappeared and the waters of the river have greatly diminished in volume, leaving only holes and ripples,—and modified his views of days perfect only in June. There were perfect days in May on the Miami. There were perfect days on all the streams that made it. The birds were multitudinous; they sang in chorus; they were, indeed, almost infinite in number—for the naturalist and the collector were unknown—the birds were *natural* residents, without fear of man, building their nests close to his habitations. A year or two ago we stopped off the cars in May in order to recall, if possible, in the shadow of a few remaining trees at a familiar place on the vanishing river, in the expected voices of the well known native birds, the delightful far-gone years. Verily we had our reward, but it was not satisfactory. It seems to us we should do our best, through legislation and personal influence to protect and multiply the birds.

—C. C. MARBLE.

OUR NEIGHBOR.

We've a charming new neighbor moved in the next door ;
He is hardly new either, he's lived there before ;
I should think he had come here two summers or more ;
His winters he spends far away.

He is handsome and stylish, most fine to behold,
In his glossy black coat and his vest of bright gold ;
He is "proud of his feathers," so I have been told,
And I half believe what people say.

His wife is a beauty, he's fond of her, too ;
He calls her his "Judy ;" I like it, don't you ?
And he sings every day all the long summer through,
Yet he is not a bit of a bore.

For he's a musician of wonderful power ;
I could list to his beautiful voice by the hour,
As he sings to his wife in their green, shady bower
In the elm tree that shadows my door.

He's a sociable neighbor, we like him full well,
Although we've not called yet, and cannot quite tell
All he says, tho' his voice is as clear as a bell,
And as sweet as the notes of a psalm.

Do you ask what his name is ? Our dear little Sue
Was anxious to know it, and asked him it, too,
And this was his answer, I'll tell it to you—
"My name is Sir Oriole, ma'am."

—*L. A. P., in Our Dumb Animals.*

BIRDS' NESTS.

THE NEST OF THE MOURNING DOVE.—The nest of the Carolina or Mourning Dove, which authorities place on the horizontal limb of a tree, is not always found in this situation, as I can testify. Last year, while wandering in early May through a piece of low woodland in Amherst, Mass., my eye was caught by a pair of well-grown youngsters covered with bluish pin feathers. The nest containing them—a loose affair of small sticks and leaves—was placed on the ground, or rather on the decayed base of a stump, surrounded by a ring of second-growth birches. Immediately suspecting their identity, I merged myself in the landscape after the manner of bird-lovers, and was soon rewarded by a sight of the parent Doves, who came sweeping down from a neighboring tree, uttering their pensive call-note. The pair had been frequent visitors about the lawn and drive-way for a few weeks previous.

I have heard of another similar instance of ground-nesting on the part of Wild Doves.

—DORA READ GOODALE.

WRENS—That clumsy little bunch of animated feathers, the Wren, is undoubtedly the most contented of dwellers on the face of the earth. In country or city he is never homeless. Anything hollow, with an aperture large enough to admit his jaunty little self is sufficient, and so long as it remains undisturbed he is a happy tenant. The variety of sites selected by this agile little creature, is greater than that of any other bird.

It has been said that "a Wren will build in anything from a bootleg to a bomb-shell." And this seems to be so.

Many an urchin can testify to having found the neat nest of the Wren in his cast-off shoe or a tin can, and nests filled with Wren eggs are frequent finds in odd places around the battle fields of the South.

The home of a Wren, a few miles from Petersburg, Va., furnishes the strangest case in the matter of queer habitations yet discovered. This country is the site of one of the most dramatic epochs of the civil war, and frequently the bones of unburied soldiers are picked up. Recently a rusty old skull was found in which one of these Wrens chose a shelter. The skull, when found, was hidden in a patch of shrubbery. The interior of the one-time pate was carefully cleaned out, and nestled in the basin of the bony structure was the birth-place of many a baby Wren. The skull made a perfect domicile. A bullet hole in the rear formed a window. An eyeless socket was the exit and entrance to the grim home. It is easy to imagine that many a family feud had its origin in the desire of others to possess so secure a home.

"I have myself," says A. W. Anthony, of San Diego, Cal., "watched Cactus Wrens in New Mexico carrying grass and thickening the walls of their old nests in October, for winter use, and have found them hidden in their nests during a snowstorm in November. But there is another trait in bird nature that I have seen very little of in print—that of building nests before or after the proper season, seemingly for the sole purpose of practice or pastime, the out-cropping of an instinct that prompts ambitious birds to build out of season even though they know that their work will be lost."



From col. Chi. Acad. Sciences.

BRUNNICH'S MURRE.
 $\frac{3}{4}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

BRÜNNICH'S MURRE.

THIS species, which inhabits the coasts and islands of the north Atlantic and eastern Arctic ocean, and the Atlantic coast south to New Jersey, has the same general habits as the common Murre, which, like all the Auks, Murres and, Puffins, is eminently gregarious, especially in the breeding season. Davie says that tens of thousands of these birds congregate to make their nests on the rocky islands, laying single eggs near one another on the shelves of the cliffs. The birds sit side by side, and although crowded together never make the least attempt to quarrel. Clouds of birds may be seen circling in the air over some huge, rugged bastion, "forming a picture which would seem to belong to the imaginary rather than the realistic." They utter a syllable which sounds exactly like *murre*. The eggs are so numerous as to have commercial value, and they are noted for their great variation in markings and ground color. On the Farallones islands, where the eggs were until recently collected for market purposes, the Murres nest chiefly in colonies, the largest rookery covering a hillside and surrounding cliffs at West End, and being known as the Great Rookery. To observe the egg-gatherers, says an eye-witness, is most interesting. "As an egger climbs his familiar trail toward the birds a commotion becomes apparent among the Murres. They

jostle their neighbors about the uneven rocks and now and then with open bills utter a vain protest and crowd as far as possible from the intruder without deserting their eggs. But they do not stay his progress and soon a pair, then a group, and finally, as the fright spreads, the whole vast rookery take wing toward the ocean. In the distance, perhaps, we see, suspended over a cliff by a slender rope, an egger gathering the eggs from along the narrow shelves of rock, seeming indifferent to the danger of the work." All this is now changed, the authorities having intervened to prevent the wholesale destruction of the eggs. The Western Gull, however, is another enemy of the Murre (the California species;) it carries off and devours both eggs and young. Mr. Bryant says the Gull picks up a Murre's egg bodily and carries it away in his capacious mouth, but does not stick his bill into it to get hold, as is stated by some writers, whose observations must have referred to the eggs already broken by the Gulls or eggers.

The eggs of Brunnich's Murre cannot be distinguished from those of the common species. They show a wonderful diversity of color, varying from white to bluish or dark emerald-green. Occasionally unmarked specimens are found, but they are usually handsomely spotted, blotched, and lined in patterns of lilac, brown, and black over the surface.

THE CANADA GOOSE.

Just a common Wild Goose of North America. In the spring and fall you will see great flocks of us flying overhead, an old Gander in the lead, crying *honk*, *honk* as loud as he can. Our nests are only simple hollows in the sand, on the shores of lakes and rivers, around which are placed a few sticks and twigs, the five eggs laid on a layer of gray down.

“You’re a Goose.”

That’s a polite way some people have of calling another stupid, but there are Geese and Geese as well as men and men. I am going to tell you about one Goose that dearly loved her master, and considering the way he treated her you may conclude she *was* a stupid Goose after all.

Well, this particular Goose took such a fancy to her owner that she would follow him about like a dog, even to the village, where she would wait outside the barber’s or other shop which he might enter.

People noticed this, and instead of calling the farmer by his proper name began to speak of him as “Mr. Goosey.” This angered the man and he ordered the poor loving Goose to be locked up in the poultry-yard. Shortly after he went to an ad-

joining town to attend a meeting; in the midst of the business he felt something warm and soft rubbing against his legs; he looked down and there stood his Goose, with protruding neck and quivering wings, gazing up at him with pleasure and fondness unutterable.

The people about shouted with laughter, which so enraged her master, that seizing his whip, he twisted the thong of it about the poor bird’s neck, swung her round and round, and supposing her dead, angrily threw her body out of the window.

A few days after Mr. Goosey was seized with a severe illness, which brought him to the verge of the grave. He recovered, however, and was able at length to sit beside the open window. There on the grass sat the Goose gazing up at him with the same old look of affection in her eyes.

“Am I never to be rid of that stupid thing?” he cried, but when he was told that through all his illness the faithful bird had sat there opposite his window, scarcely touching food, his hard heart melted, and from thenceforth Mr. Goosey treated his feathered friend with the greatest kindness.



From col. Chi. Acad. Sciences.

CANADA GOOSE.
L. T. Silliman

Copyright by
Nature Study Publ. Co., 1908, Chicago.

THE CANADA GOOSE.

"Steering north, with raucous cry,
Through tracts and provinces of sky,
Every night alighting down
In new landscapes of romance,
Where darkling feed the clamorous clans
By lonely lakes to men unknown."

NORTH AMERICA at large is the range of this magnificent bird. Common Wild Goose and Grey Goose are its other names, and by which it is generally known. The Canada Goose is by far the most abundant and universally distributed of all North American Geese, and in one or other of its varieties is found in all the states and territories of our country except perhaps Florida and the Gulf States. In Texas, however, it is plentiful during the winter months. According to Hallock, although by far the greater portion of Wild Geese which pass the winter with us, go north to breed, still in suitable localities young are reared all over the United States from North Carolina to Canada. They nest in the wilder parts of Maine, and are especially numerous in Newfoundland near the secluded pools and streams so abundant throughout that island. There, remote from man, they breed undisturbed on the edges and islands of the ponds and lakes. The Geese moult soon after their arrival in the spring, and, says Hallock, owing to the loss of their pinion feathers are unable to fly during the summer or breeding seasons, but they can run faster than a man on the marshes, or if surprised at or near a pond, they will plunge in and remain under water with their bills only above the surface to permit breathing, until the enemy has passed by. They feed on berries and

the seeds of grasses. Both the old and young become enabled to fly in September, and as soon after that as the frost affects the berries, and causes the seeds of the grasses on the marshes and savannas to fall to the earth, or otherwise when the snow falls and covers the ground, they collect in flocks and fly off to the southern shores of the island, and from thence to the Gulf of St. Lawrence, where they remain until December, and then assembled, take flight in immense flocks to the southern parts of America, to return in the spring.

The Canada Goose also breeds in great numbers on the Mississippi river, in which region it often places its nest in trees, choosing generally a cottonwood stub not more than thirty feet in height. The young are said to be carried from the nest to the water in the mother's bill, as are the young of the Wood Duck. (See BIRDS, vol. ii, p. 21).

The Wild Goose is often domesticated, and in many portions of the country they are bred in considerable numbers. When these birds return south at the commencement of winter they are generally very thin and poor, being quite worn out by their long journey. They soon recuperate, however, and in a short time become fat and are delicious eating. A full and excellent account of the method of capturing the Canada Goose may be found in Hallock's "Gazetteer."

THE BROWN CREEPER.

I'm not a showy looking bird like my friend the Woodpecker, but my habits are something like his—and so is my tail. He uses his, you know, to aid him in climbing trees, and so do I. They call me the *Creeper* because I am always creeping over the timber in search of insects. If you ever see a brown-streaked little fellow, resembling a Wren, traveling up a tree in short stages, now stopping to pick out an insect lurking in the crevices of the bark, or returning head downwards to pounce on an unwary fly, that is your humble servant the *Brown Creeper*. Up again, you will then see me creep, just like a little mouse, uttering now and then a low plaintive note ; clear to the top I go, exploring every nook and cranny, never using my wings once.

Last summer a little boy in the park wanted to get a good look at me, so he very slyly crept up to the tree which I was

exploring, thinking, perhaps, that I was too busy to notice that he was there. But I did see him, for we little birds have to be always on the watch against our human, as well as feathered enemies, so I just stood still and peeked out at him from the other side of the tree. Very slyly then he moved around to that side, and very slyly did I move around to the other, keeping the tree trunk all the time between me and his bright blue eyes.

“He’s playing hide and seek with me, Mama,” he shouted, and so pleased was the little fellow that it was quite a while before I flew away.

Like the Woodpecker, I prefer a hole in a tree in which to build my nest, but instead of boring I look for a tree that has some of its bark loose enough for me to squeeze in. I line it with dry grass, moss, and feathers and see to it that the overhanging bark shelters me and my four, or six, white, red-speckled eggs.



From col. Chi. Acad. Sciences.

BROWN CREEPER.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE BROWN CREEPER.

A LITTLE mite of a bird is this pretty creature, which many observers claim is seldom seen, or, indeed, is known to few besides the special student of ornithology and the collector. We venture to assert that any one with fairly good eyes can see it almost any day creeping over the timber in search of its insect food. Besides seeing it in the deepest woods, we often notice it in the open places in parks, and in gardens and orchards it is quite common. It commences operations at the foot of a tree, and travels upwards in short stages, "now stopping to pick out an insect lurking in the crevices of the bark with its long, slender bill, or returning head downwards to pounce on an unwary fly. Up again it creeps, more like a mouse than a bird, occasionally uttering a low and plaintive note; right to the top of the tree it mounts, exploring every nook and cranny likely to reward its search as it goes. Now it creeps on the under side of a projecting limb, then again on the top, and although it will explore an entire tree, still it but rarely uses its wings to convey it from one part to another. You will also find that it, like the Woodpecker, endeavors to be on the opposite side to you, and carry on its

explorations unseen." Curiosity, however, often seems to get the better of the Creeper, and you will see its light colored breast and sharp little head peep trustfully at you and again vanish from sight.

The Creeper is admirably adapted to its ways of life. Its bill is formed for obtaining its insect food, and its tail supports it while climbing.

The Brown Creeper nests in early summer, when insect life is most abundant, and, like the Woodpecker, prefers a hole for the purpose. This it lines with dry grass, moss and feathers, and makes a very warm and comfortable home. The eggs are from five to eight, white, spotted and speckled with red. The Creeper is not migratory, and we see it in the woods throughout the year. It is hardy and lives sumptuously the winter through. One who was very fond of the little creatures said: "If the Swallow were to visit us at this time, it would undoubtedly perish, for the air in winter is almost clear of insect life; but the little Creeper can live in ease when the sun is at Capricorn, just because he can climb so dexterously, for the bark of trees abounds with insects, and more particularly their eggs and larvae, which lie there torpid until called into life by the genial presence of the vernal sun."

THE DOWNY WOODPECKER.

Another Woodpecker? Yes, there are such a tribe of us, you know ; more than you can count on your fingers and toes, as my cousin the Red-Bellied Woodpecker said in the February number of BIRDS.

The word toes reminds me that I am not one of the three-toed fellows he was so anxious to tell about. I have four, as you see, two before and two behind. So have most of the Woodpeckers. Should you be looking out for me this summer you will recognize me by my four toes, the white band down my back, and the two white stripes on the side of my head.

My tongue you can't see, but it is small, flat, short, and horny, armed along the edges with hooks. When I catch an insect I do it by throwing my tongue forward, out of my mouth. I have an idea the insects consider my treatment of them rather rough. If I didn't eat them, the wood-boring ones, would destroy all the trees. My bill isn't strong enough to bore in the hard wood ; I only injure the bark, no matter what some people may say. The wood-eating beetles, caterpillars, spiders,

daddy longlegs, grass-hoppers, and flies, are all grist for my mill—or bill, rather. I like beech-nuts, too, when I can find them.

I'm the smallest of all the Woodpecker family, quiet and unobtrusive they say, in my manners. I am sociable, however, and go about a great deal in the company of other birds. Mr. Nuthatch, Mr. Brown Creeper, Mr. Titmouse, and Mr. and Mrs. Wren are my especial friends.

Can I drum ?

Indeed, yes. I wouldn't belong to the Woodpecker family if I couldn't. All I need is the stub of a dead limb whose center is hollow and whose shell is hard and resonant. I will drum on that with my bill for an hour at a time, stopping now and then to listen for a response from my mate or a rival.

Early in the spring we "Downies" pick a hole in a dead tree, or in a post or rail of a fence, in which we lay four, five, or six glossy white eggs. Sometimes it takes us a whole week to chisel out that hole, and we are so busy that a little boy or little girl can get very near without our minding it.



From col. Chi. Acad. Sciences.

DOWNEY WOODPECKER.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE DOWNY WOODPECKER

Every leaf was at rest, and I heard not a sound,
Save a Wood-drummer tapping on a hollow beech tree.

THIS little Woodpecker is the smallest of all those inhabiting the United States. In the shade trees about houses and parks, and especially in orchards, he may be frequently seen tapping or scratching on the limb of a tree within two or three yards' distance, where he has discovered a decayed spot inhabited by wood-boring larvae or a colony of ants, his food consisting of ants, beetles, bugs, flies, caterpillars, spiders, and grasshoppers. The late Dr. Glover of the Department of Agriculture, states that on one occasion a Downy Woodpecker was observed by him making a number of small, rough-edged perforations in the bark of a young ash tree, and upon examination of the tree when the bird had flown, it was found that wherever the bark had been injured, the young larvae of a wood-eating beetle had been snugly coiled underneath and had been destroyed by the bird. Beechnuts also constitute a considerable portion of the food of this bird. Dr. Merriam says that in northern New York they feed extensively on this nut, particularly in fall, winter, and early spring.

This miniature Woodpecker is very social in its habits, far more so than other species, and is often found associated with other birds, in the woods, the orchards, along fence rows, and not infrequently in the cities. He is often seen in company with the White-breasted Nuthatch (See Vol. II, p. 118) and the Brown Creeper (Vol. III, p. 214).

Early in the spring the "Downies" retire to the woods to make their nests, preferring the vicinity of running water. The nest is begun about the

second or third week in May, and consumes from two days to a week in building. The holes are usually excavated in dead willow, poplar, or oak trees, and the height varies from four to thirty feet, generally about fifteen feet. The entrance to the nest is about two inches in diameter, and the depth of the nest hole varies from eight to eighteen inches. The eggs are four or five, rarely six, and are pure glossy-white.

We know of no more interesting occupation than to observe this bird. It is fond of drumming on the stub of a dead limb whose center is hollow, and whose shell is hard and resonant. Upon such places it will drum for an hour at a time, now and then stopping to listen for a response from its mate or of some rival. At all times it is unsuspicious of man, and when engaged in excavating the receptacle for its nest it continues its busy chiseling, unheeding his near approach.

The Woepecker is wrongfully accused of boring into the sound timber, and, by letting in the water, hastening its decay. As Dixon says: "Alas! poor harmless, unoffending Woodpecker, I fear that by thy visits to the trees thou art set down as the cause of their premature decay. Full well I know thy beak, strong as it is, is totally incapable of boring into the sound timber—full well do I know that, even if thou wert guilty of such offense, nothing would reward thy labors, for thy prey does not lurk under the bark of a healthy tree. Insects innumerable bore through its bark and hasten its doom, and it is thy duty in Nature's economy to check them in their disastrous progress."

THE NEW TENANTS.

BY ELANORA KINSLEY MARBLE.

And now the little Wrens are fledged
And strong enough to fly;
Wide their tiny wings they spread,
And bid the nest "good-bye."

Such a chattering as greeted Mrs. Wren when she returned with a fine black spider in her bill. All the children talked at once. Bobbie alone never uttered a word.

"You naughty boy," exclaimed Mrs. Wren, turning to the crest-fallen Pierre, "did I not tell you to take care of your brothers and little sister? The idea of trying to fly before you have had a lesson! I have a good mind to whip every one of you," and the irate Mrs. Wren very unjustly did indeed peck every little head sharply with her bill.

Bobbie cowered in the nest much too frightened to whimper or even mention the injury to one of his legs which he had sustained in his fall.

Mr. and Mrs. Wren the next day proceeded to give the children a lesson or two in flying.

"My tail is so stubby," wailed Emmett at the first trial, "it brings me right down to the ground."

"Tho doth mine," lisped little Dorothy, "dess wish I had no tail at all, so I do," at which the others laughed very heartily.

Bobbie made a heroic effort to do as did the rest, but at the first movement sank back into the nest with a cry of pain.

"Such fortitude!" exclaimed Mrs. Wren when it was found one of his legs was broken, "not a whimper has the little fellow made since his fall. How heroic! How like my dear, dear papa!" and Mrs. Wren laughed, and then cried, from mingled pity and joy.

"H'm," commented Mr. Wren, "if Bobbie had remembered the motto I gave them before I left yesterday morning, this accident wouldn't have

happened. Can you repeat it?" turning to the eldest of the brood.

"Be sure you're right, then go ahead," shouted Pierre, totally forgetting he had not heeded the rule any more than Bobbie.

"Yes, a safe rule to go by," said Mr. Wren, gravely stroking his chin with one claw. "Dear, dear," ruefully examining the injured limb, "now the the child will go stumping through life like his grandpa. I only hope," with a dry cough, "that he'll not turn out a rowdy and lose one eye, too."

"He jests at scars who never felt a wound," loftily replied Mrs. Wren, who seemed never to forget a quotation.

"For my part I am proud that one of my boys should turn out to be such a spirited little fellow. But there, Mr. Wren, the children are calling you from that bunch of weeds over yonder. Go down to them, while I fetch a nice canker-worm for Bobbie."

After a few days the lame Bobbie was able to leave the nest and go hopping around with the other children, adding his feeble *chur chur* to theirs. Mr. and Mrs. Wren led them from one place to another, always among the weeds and shrubbery where they were soon taught to earn their own livelihood.

"Moths, butterflies, gnats, flies, ants, beetles, and bugs constitute our bill of fare," said Mrs. Wren as they went whisking along, "together with thousand-legs, spiders, and worms. If we didn't eat them they would destroy the fruits in their seasons, so you see, my children, what valuable citizens we are in the world."

At nightfall Mr. and Mrs. Wren, with their brood, flew to the crotch of

a tree, and in ten seconds every little head was under a wing, and every little Wren sound asleep.

"Well," said Mr. Wren one day, "the children are old enough now to take care of themselves, and we must begin, my dear, to build a nest in which once more to begin housekeeping."

"It will not be in an old tin pot this time," replied Mrs. Wren, with a toss of her head, "and furthermore, Mr. Wren, I intend to have entirely new furniture."

"Of course, of course," assented her mate, "whoever heard of a Wren raising a second brood in the same nest? We are much too neat and nice for that, my dear."

"We," sniffed Mrs. Wren, ever ready for quarrel. "I'd like to know, Mr. Wren, what you had to do with building the nest, I would, really! Humph!" and Mrs. Wren flirted her tail over her head and laughed shrilly.

"I brought the first sticks, my dear," he answered mildly, "and didn't I do all the house hunting? Besides, I forgot to tell you, that when looking about in April, I found two other apartments which, if the tin-pot had not appeared suitable, I intended to offer you. In order to secure them I partly furnished each, so that other house hunters would know they were not 'to let.'"

"Humph!" returned Mrs. Wren, though exceedingly well pleased, "I'll wager we'll find a Sparrow family in each one of them."

"No we won't," chuckled Mr. Wren "for the houses I selected were much too small for Mr. and Mrs. Sparrow to squeeze in."

"You clever fellow," exclaimed Mrs. Wren, pecking him gleefully with her bill. "I am proud of my hubby, I am, indeed," and Mr. Wren laughed, and hopped about, never hinting to his innocent spouse that all the gentlemen Wrens did the same thing every year.

The next day, while preening their feathers, and getting ready for a visit to the apartments Mr. Wren had spoken of, a cry of distress smote upon their ears.

"That sounds like our Dorothy's voice," said Mrs. Wren, her little knees knocking together in fright.

"It *is* Dorothy calling for help," assented Mr. Wren. "I left the children in the orchard. Come, let us fly over there as quickly as we can."

On the ground, under some bushes, they found huddled their frightened group of little ones, while above, on a limb of a tree, perched Mr and Mrs. Jay, uttering at intervals their harsh cry of *jay, jay, jay*.

"Its our Bobbie," cried Mrs. Wren, aghast, after she had counted her brood and found one of them missing, "look at him fighting over there with that young Jay."

"That's it, give it to him," screamed the delighted Mr. Jay to his young son, "hit him in the eye, my boy, hit him in the eye."

Mr. and Mrs. Wren flew about Bobbie uttering cries of distress.

"Fair play, fair play," cried papa Jay, flying down almost upon Mr. Wren's back. "Give the young ones a chance, or——"

A loud, sharp twitter from the tree top caused Mr. Jay to glance up.

"My old enemy," he exclaimed, his crest falling at once, as a low crown encircling a pompon of orange-red showed itself among the green branches. "That tyrant, Mr. Kingbird. He's always meddling in other people's affairs, he is. I'd like to wring his neck. Come, Mrs. Jay; come, my son," he screamed, and off they flew to boast of the victory among their neighbors.

"I hope your little boy is not much hurt," said Mr. Kingbird rather pompously, "I arrived just in the nick of time, I think."

"Oh, my Bobby," wailed Mrs. Wren, wiping the blood from his face, "that dreadful Jay has scratched out one of his eyes."

"How did it happen?" sternly inquired Mr. Wren, "tell me the truth or——"

Dorothy interrupted her father with loud sobbing.

"I—I was flirting," she stammered "just a *little*, with young Mr. Jay, papa—you know how handsome he is, and bold—when Bobby steps up, and he says—he says——"

"Well, go on, my little miss," said Mr. Kingbird, deeply interested, "what did your brother say?"

"He said," wiping her eyes with a corner of her wing, "that 'birds of a feather flock together,' and a girl with such a grandpa as I had should be ashamed to associate with the son of a robber and coward like Mr. Bluejay, and so——"

"And so young Mr. Jay pitched into me," interrupted Bobbie, "and I pitched into him. I'd a licked him, too, Pop," he added, flourishing his crippled leg, "if his old pa and ma hadn't come up when they did and told him to hit me in the eye."

"A chip off the old block, ma'am," said Mr. Kingbird, who had heard of Mrs. Wren's fighting papa, "a chip off the old block, I see. Well, good-day all, good-day. As your son wisely says 'birds of a feather flock together,' and it wouldn't look well, you know, for a person of my aristocratic appearance to be seen in such humble company. So good-day, good-day," and off the pompous fellow flew leaving Mr. and Mrs. Wren decidedly angry though grateful.

Another week found the pair building a nest in the cavity of a maple tree near the study window. To the sticks and straws which Mr. Wren had placed therein early in the season, Mrs. Wren added spider webs and

cocoons, lining the nest, or furnishing it as she called it, with horsehair and the downiest goose and duck feathers she could procure.

"There!" said she, when all was completed and the first egg laid, "Mrs. John can't sneer at our home now. No coarse chicken feathers, or stable straw this time, Mr. Wren. We will use the other apartment you chose for the third brood, for three we are to have this summer as well as Mrs. John. When we go south in November, our family I intend shall be as large as hers."

Mr. Wren made no answer, but, possibly being such an uncommonly wise bird, inwardly marveled over that imperious force, that wonderful instinct which made it necessary for them and all the feathered tribe to reproduce their kind.

Very carefully, one winter's day, Bridget removed the nest from the tinpot and wreathing it in ribbons, hung it above her chest of drawers in the the attic.

"It do same," said she to the children, who prided themselves upon their knowledge of the looks and habits of the House Wren, "that in sthudo in the birds this summer I do be after learnin' a lesson I wasn't expectin' meself at all."

"A lesson?" said they curiously.

"Indade! Its young ye's aire, me darlint's, to be thinkin' of the same, but sure its not meself that'll ever be forgotten the patience, ingenuity, industry, and conjoogal love of the wee pair. Faith but it was a purty sight. Dumb animals indade! Niver sphake to me of *dumb* animals, for be St. Patrick, if them two blessed little crathers didn't talk, schold, make love, and sing in a langwidge all their own, then me grandfather's name wasn't Dinnis, and I'm not Bridget O'Flaherty, at all, at all."

[THE END.]



From col. F. M. Woodruff.

CHICAGO COLORTYPE CO., CHIC. & NEW YORK.

OLD SQUAW DUCK.

$\frac{1}{4}$ Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

THE OLD SQUAW DUCK.

HERE is an instance where the female is the head of the family indeed, for by common consent the name includes the male of this species. It has numerous other names, however, as Old Wife, South-Southerly, Long-tailed Duck, Swallow-tailed Duck, Old Injun (Massachusetts and Connecticut;) Old Molly, Old Billy, Scolder, (New Hampshire and Massachusetts.)

The habitat of the Old Squaw is the northern hemisphere; in America, south in winter to nearly the southern border of the United States. It is distributed throughout the northern portions of the globe, but makes its summer home in Arctic regions. George Harlow Clarke, Naturalist, Peary Polar Expedition, in a recent article mentioned that, "in June the Old Squaw's clanging call resounded evrywhere along shore, and the birds themselves were often perceived gliding to and fro amid the ice cakes drifting with the tide between the main ice-floe and the land." It is a resident in Greenland and breeds in various places in Iceland. The nests are made on the margins of lakes or ponds, among low bushes or tall grass, are constructed of grasses, and generally, but not always, warmly lined with down and feathers. The eggs are from six to twelve in number. In the United States the Long-tail is found only in winter. Mr. Nelson found it to be an abundant winter resident on Lake Michigan, where the first stragglers arrived about the last of October, the main body arriving about

a month later and departing about the first of April, a few lingering until about the last of the month.

The words *south - south - southerly*, which some have fancied to resemble its cry, and which have accordingly been used as one of its local names, did not, to the ear of Dr. Brewer, in the least resemble the sounds which the bird makes; but he adds that the names "Old Wives" and "Old Squaws" as applied to the species are not inappropriate, since when many are assembled their notes resemble a confused gabble. Hallock says that most of the common names of this Duck are taken from its noisy habits, for it is almost continually calling.

Mr. E. P. Jaques, asks, in *Field and Stream*, "What has become of our Waterfowl?" assuming that their numbers have greatly diminished. "The answer is a simple one," he goes on to say; "they have followed conditions. Take away their breeding and feeding grounds and the birds follow. Bring back their breeding and feeding grounds and lo! the birds reappear. For the past five years waterfowl have been about as scarce in the Dakotas as in Illinois or Indiana. The lakes were dry and conditions were unfavorable for them. In the spring of 1897 the lakes filled up once more. For the most part the bottoms of the lakes were wheat stubbles. This furnished food for the spring flight and thousands of birds nested there. When the wheat was gone the aquatic growth took its place and for every thousand Ducks that tarried there in the spring, ten thousand appeared in the fall."

THE WHITE-FACED GLOSSY IBIS.

IBISES, of which there are about thirty species, are distributed throughout the warmer parts of the globe. Four species occur in North America.

According to Chapman, they are silent birds, and live in flocks during the entire year. They feed along the shores of lakes, bays, and salt-water lagoons, and on mud flats over which the tide rises and falls.

The beautiful, lustrous White-faced Glossy Ibis inhabits the south-western United States and tropical America. It is found as far north as Kansas, and west through New Mexico and Arizona to California. In southern Texas it is very abundant, and in some localities along the banks of the Rio Grande swarms by thousands. Dr. J. C. Merrill in May, visited a large patch of tule reeds, growing in a shallow lagoon about ten miles from Fort Brown, in which large numbers of this Ibis and several kinds of Herons were breeding. The reeds grew about six feet above the surface of the water, and were either beaten down to form a support for the nests, or dead and partly floating stalks of the previous year were used for that purpose. Dr. Merrill states that it was impossible to estimate the number of Ibises and different Herons nesting here. "Both nests and eggs of the Ibises were quite unlike those of any of the

Herons, and could be distinguished at a glance. The nests were made of broken bits of dead tules, supported by and attached to broken and upright stalks of living ones. They were rather well and compactly built, quite unlike the clumsy platforms of the Herons. The eggs were nearly always three in number, and at this date were far advanced toward hatching; many of the nests contained young of all sizes.

The walk of the Ibis is quiet and deliberate, though it can move over the ground with considerable speed whenever it chooses. Its flight is lofty and strong, and the bird has a habit of uttering a loud and peculiar cry as it passes through the air.

The Ibis was formerly invested with sacerdotal honors by the ancient Egyptians, and embalmed and honored after death with a consecrated tomb, in common with the bull and the cat. The bird probably owes its sacred character to the fact that its appearance denotes the rising of the Nile, an annual phenomenon on which depends the prosperity of the whole country.

The food of the Ibis consists mostly of mollusks, both terrestrial and aquatic, but it will eat worms, insects, and probably the smaller reptiles.

The sexes have similar plumage, but the female is smaller than her mate.



From col. Chi. Acad. Sciences.

WHITE-FACED GLOSSY IBIS.
37 Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

SOME LOVERS OF NATURE.

Our Music's in the Hills.—EMERSON.

The groves were God's first temples.—BRYANT.

Nature, the vicar of the Almighty Lord.—CHAUCER.

The liquid notes that close the eye of day, (the Nightingale).—MILTON.

When spring unlocks the flowers to paint the laughing soil.—BISHOP HEBER.

O, for a seat in some poetic nook,
Just hid with trees and sparkling with a brook.—LEIGH HUNT.

By shallow rivers, to whose falls
Melodious birds sing madrigals.—CHRISTOPHER MARLOWE.

To me the meanest flower that blows can give
Thoughts that do often lie too deep for tears.—WORDSWORTH.

To him who in the love of nature holds
Communion with her visible forms, she speaks
A various language.—BRYANT.

And this one life, exempt from public haunt,
Finds tongues in trees, books in the running brooks,
Sermons in stones, and good in everything.—SHAKESPEARE.

And now 'twas like all instruments,
Now like a lonely flute ;
And now it is an angel's song,
That makes the heavens be mute.—COLERIDGE.

There is a pleasure in the pathless woods,
There is a rapture in the lonely shore,
There is society, where none intrudes,
By the deep sea, and music in its roar ;
I love not Man the less, but Nature more.—BYRON.

In June 'tis good to be beneath a tree
While the blithe season comforts every sense;
Steeps all the brain in rest, and heals the heart,
Brimming it o'er with sweetness unawares,
Fragrant and silent as that rosy snow
Wherewith the pitying apple-tree fills up
And tenderly lines some last-year's Robin's nest—LOWELL.

THE ARKANSAS KINGBIRD.



NE of the difficulties of the scientific ornithologist is to differentiate species. This bird is often confounded with the Flycatchers, and for a very good reason, its habits being similar to those of that family. It is almost a counterpart of the Kingbird, (See BIRDS, vol. ii, p. 157) possessing a harsher voice, a stronger flight, and, if possible, a more combative, pugnacious spirit. It is a summer resident, is common in the western United States, and occasionally a straggler far eastward, migrating southward in winter to Guatemala.

Col. Goss, in his history of the birds of Kansas, one of the most comprehensive and valuable books ever published on ornithology, says that the nesting places and eggs of this species are essentially the same as those of the Kingbird. They are brave and audacious in their attacks upon the birds of prey and others intruding upon their nesting grounds. Their combative spirit, however, does not continue beyond the breeding season. They arrive about the first of May, begin laying about the middle of that month, and return south in September. The female is smaller than the male and her plumage is much plainer.

Mr. Keyser "In Birdland" tells an interesting story which illustrates one of the well known characteristics of the Kingbird. "One day in spring," he says, "I was witness to a curious incident. A Red-headed Woodpecker

had been flying several times in and out of a hole in a tree where he (or she) had a nest. At length, when he remained within the cavity for some minutes, I stepped to the tree and rapped on the trunk with my cane. The bird bolted like a small cannon ball from the orifice, wheeled around the tree with a swiftness that the eye could scarcely follow, and then dashed up the lane to an orchard a short distance away. But he had only leaped out of the frying-pan into the fire. In the orchard he had unconsciously got too near a Kingbird's nest. The Kingbird swooped toward him and alighted on his back. The next moment the two birds, the Kingbird on the Woodpecker's back, went racing across the meadow like a streak of zigzag lightning, making a clatter that frightened every echo from its hiding place. That gamy Flycatcher actually clung to the Woodpecker's back until he reached the other end of the meadow. I cannot be sure, but he seemed to be holding to the Woodpecker's dorsal feathers with his bill. Then, bantam fellow that he was, he dashed back to the orchard with a loud chippering of exultation. 'Ah, ha!' he flung across to the blushing Woodpecker, 'stay away the next time, if you don't fancy being converted into a beast of burden?'

Eggs three to six, usually four, white to creamy white, thinly spotted with purple to dark reddish brown, varying greatly in size.



From col. Chi. Acad. Sciences.

ARKANSAS KING-BIRD.
3/4 Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

QUEER RELATIONS.

AN English terrier, despoiled of her litter of puppies, wandered around quite inconsolable. A brood of ducklings one day attracted her attention. Notwithstanding their quacks of protest, she seized them in her mouth, bore them to her kennel, and with the most affectionate anxiety followed them about, giving them, in her own fashion, a mother's care.

When the ducklings at length took to water, her alarm knew no bounds. "You dreadful children," her sharp barks seemed to say when they returned to land, and taking them in her mouth bore them one by one back to safety, as she thought, to the kennel.

The year following, when again deprived of her puppies, she adopted two cock-chickens, rearing them with the same care she had bestowed upon the ducklings. Their voices, however, when they grew older, greatly annoyed her, and by various means their foster-mother endeavored to stifle their crowing.

A hen that had selected an unused manger in which to lay her eggs, and rear her brood, found that the barn cat had also selected the same place in which to pass her hours of repose. The hen made no objection to the presence of Mrs. Tabby, and *vice-versé*, so that a strong friendship in time grew up between the two.

Things went on very smoothly, the hen placidly sitting on her eggs, while Mrs. Tabby came and went at will,

spending at least half her time beside her companion as friendly as though she were a sister cat.

Vainly did the hen sit, vainly did she turn her eggs. All the warmth in the world would not have hatched a chick from the stale eggs beneath her.

Mrs. Tabby, however, had better luck. To the hen's amazement she found beneath her very nose one morning five squirming furry little creatures which might have been chicks but were not. Certainly they were young of some sort, she reflected, and with true motherly instinct she lent her aid to their proper bringing up.

The kittens thrived, but unfortunately, when still of tender age were deprived, by death of their mother. All but one of her offspring found comfortable homes elsewhere, and that one received the devoted attention of the hen during the whole of that summer.

"To see it going between the house and barn clucking for the kitten," says Dr. Beadner in *Our Animal Friends*, "was indeed a funny sight, and quite as remarkable to see the kitten run to her when she made the peculiar call that chickens understand means something to eat. At night and during the resting hours of the daytime, kittle would crawl under the warm wings of her foster mother; and the brooding hen and her nestling kitten were happy and contented, little dreaming and caring less that they were so far from being related to each other."

ONE AUDUBON SOCIETY.

FIVE HUNDRED invitations were sent out for a novel reception by the Wisconsin Audubon Society a while ago. One of the directors lent a large, handsome house, and six milliners were invited to send hats unadorned with aigrettes or birds. Ostrich plumes, quills and cock's-tails were not disbarred. Twenty-five other milliners applied for space, "everybody" went, and a great many tastefully trimmed hats were sold. People who had never before heard of the Audubon Society became, through the newspaper reports of the affair, greatly interested in its object, and the society itself greatly encouraged through the fact that by their hats and bonnets many of the "best" people of Milwaukee were ready to proclaim it no longer good form to wear the plumes or bodies of wild birds.

"Certificates of heartlessness," a writer in *Our Dumb Animals* calls them and we know of no better appellation to apply. Women of fashion, says the same writer, have been urged to use the power which they possess—and it is a power greater than that of law—to bring this inhumanity to an instant stop. The appeals for the most part were in vain. Birds continue to be slaughtered by millions upon millions, simply for the gratification of a silly vanity of which intelligent women should be ashamed. Whole species of the most beautiful denizens of field and forest, woodland and shore, have been almost or quite exterminated.

Song birds have been driven further and further from the dwellings of men; our country is stripped of one of its least costly and most charming delights and all that women may deck themselves in conformity with a fad.

A bill for the protection of birds was passed on March 24, by the Senate of the United States, introduced into the House of Representatives on March 25, and referred to the Committee on Agriculture. It is entitled "An Act for the Protection of Song Birds."

We confess, says the same writer, to a feeling of humiliation when reading this bill, because it seems a just indictment of the women of America on a charge of willful, wanton, reckless inhumanity. That such legislation should be made necessary, through vanity alone, ought in our estimation, to bring the blush of shame to every good woman's cheek.

"I didn't think," is the usual reply of the fair sex, when approached on the subject. "I didn't think." Aye you didn't think, but that plea can no longer avail when press and pulpit, in the name of humanity, so earnestly and eloquently plead with you to spare the birds.

If compassion for the little creature whose life went out in agony, to supply that ornament above your brow does not move you to abstain from wearing such in the future, then the knowledge that some of the "best" people in the country consider it "bad form," perhaps will. —E. K. M.

The lady has surely a beautiful face,
She has surely a queenly air;
The bonnet had flowers and ribbon and lace;
But the bird has added the crowning grace—
It is really a charming affair.

Is the love of a bonnet supreme over all,
In a lady so faultlessly fair?
The Father takes heed when the Sparrows fall,
He hears when the starving nestlings call—
Can a tender woman *not care?*

—SUSAN E. GAMMONS, *Our Dumb Animals*.



From col. Chi. Acad. Sciences.

EGGS.
Life-size.

Copyright by
Nature Study Pub. Co., 1898, Chicago.

1. Cat Bird. 2. Robin. 3. Chickadee. 4. Long-billed Marsh Wren. 5. Brown Thrasher. 6. Yellow Warbler. 7. Red-eyed Vireo. 8. Loggerhead Shrike. 9. Cedar Waxwing. 10. Cliff Swallow. 11. Martin. 12. Rose-breasted Grosbeak. 13. Scarlet Tanager. 14. Towhee. 15. Song Sparrow. 16. Chipping Sparrow. 17. Vesper Sparrow. 18. Great-tailed Grackle. 19. Bronzed Grackle. 20. Baltimore Oriole. 21. Orchard Oriole. 22. Meadow Lark. 23. Red-winged Blackbird. 24. Blue Jay. 25. Prairie Horned Lark. 26. Wood Pewee.

THE YOUTH OF BUDDHA.

From "THE LIGHT OF ASIA."

. . . . In mid-play the boy would oft-times pause,
Letting the deer pass free; would oft-times yield
His half-won race because the laboring steeds
Fetched painful breath; or if his princely mates
Saddened to lose, or if some wistful dream
Swept o'er his thoughts. And ever with the years
Waxed this compassionateness of our Lord,
Even as a great tree grows from two soft leaves
To spread its shades afar; but hardly yet
Knew the young child of sorrow, pain, or tears,
Save as strange names for things not felt by kings,
Nor ever to be felt. But it befell
In the royal garden on a day of spring,
A flock of wild Swans passed, voyaging north
To their nest-places on Himâla's breast.
Calling in love-notes down their snowy line
The bright birds flew, by fond love piloted;
And Devadatta, cousin of the prince,
Pointed his bow, and loosed a willful shaft
Which found the wide wing of the foremost Swan
Broad-spread to glide upon the free blue road,
So that it fell, the bitter arrow fixed,
Bright scarlet blood-gouts staining the pure plumes.
Which seeing, Prince Siddârtha took the bird
Tenderly up, rested it in his lap—
Sitting with knees crossed, as Lord Buddha sits—
And, soothing with a touch the wild thing's fright,
Composed its ruffled vans, calmed its quick heart,
Caressed it into peace with light kind palms
As soft as plantain leaves an hour unrolled;
And while the left hand held, the right hand drew
The cruel steel forth from the wound, and laid
Cool leaves and healing honey on the smart.

SUMMARY.

Page 206.

BRUNNICH'S MURRE.—*Uria lomvia*.

RANGE—Coasts and islands of the north Atlantic and eastern Arctic oceans, south on the Atlantic coast of North America to New Jersey.

NEST—On the bare rock, often on the narrow shelves of cliffs.

EGGS—One.

Page 210.

CANADA GOOSE.—*Branta canadensis*.
Other names: "Common Wild Goose," "Grey Goose," "Honker."

RANGE—North America at large.

NEST—Of dried grasses, raised about twelve inches from the ground; has been found in trees.

EGGS—Generally five, of a pale dull greenish color.

Page 214.

BROWN CREEPER.—*Certhia familiaris americana*.

RANGE—Eastern North America, breeding from northern border of United States northward.

NEST—In holes of trees lined with dry grass, moss, and feathers.

EGGS—Five to eight.

Page 218.

DOWNY WOODPECKER.—*Dryobates pubescens*. Other name: "Little or Lesser 'Sapsucker.' This, however, is a misnomer.

RANGE—Northern and eastern North America, and sporadically the western portions—Colorado, Utah, Nevada, California, etc.

NEST—In an excavation in a tree.

EGGS—Four or five, rarely six, pure glossy white.

Page 223.

OLD SQUAW DUCK.—*Clangula hyemalis*.
Other names: South Southerly; Long-tailed Duck; Swallow-tailed Duck; Old Injun (Mass. and Conn.) Old Molly; Old Billy; Scolder (New Hampshire and Massachusetts.)

RANGE—Northern hemisphere; south in winter to nearly the southern border of the United States.

NEST—On the margins of lakes and ponds, among low bushes or low grass, warmly lined with down and feathers.

EGGS—From six to twelve, of pale, dull grayish pea-green.

Page 227.

WHITE-FACED GLOSSY IBIS.—*Plegadis autumnalis*.

RANGE—Tropical and sub-tropical regions generally; rare and of local distribution in the southeastern United States and West Indies.

NEST—Of rushes, plant stems, etc., in reedy swamps on low bushes.

EGGS—Three, rather deep, dull blue.

Page 231.

ARKANSAS KINGBIRD.—*Tyrannus verticalis*. Other name: Arkansas Flycatcher.

RANGE—Western United States from the plains to the Pacific, and from British Columbia south through Lower California and western Mexico to Guatemala.

NEST—On branches of trees, in open and exposed situations, six to twenty feet from the ground; built of stems of weeds and grasses.

EGGS—Three to six, white, thinly spotted with purple to dark redish-brown.

VOLUME III. JANUARY TO JUNE, 1898.

INDEX.

Apple Blossom Time	pages 153
Audubon Society, One	" 234
Aviaries	" 121-2
Birds, Foreign Song Birds in Oregon	" 123
Birds, in the Schools	" 20
Birds, Hints on the Study of Winter	" 109
Birds, Interesting Facts About	" 100
Birds' Answer, The	" 83
Bird Study, The Fascinations of	" 164
Birds, Let Us All Protect the Eggs of the	" 154
Birds, Pairing in Spring	" 189
Bird, Only a	" 73
Bird Superstitions and Winged Portents	" 172
Bird Day	" 82
Birds, a Friend of	" 43
Bird, The Mound	" 114
Bird Lovers, Some	" 81
Bittern, Least, <i>Botaurus exilis</i>	" 46-47
Bob White, <i>Colinus virginianus</i>	" 16-18-19-34
Buddha, The Youth of	" 237
Christmas, Where Missouri Birds Spend	" 84
Cockatoo, Rose, <i>Cacatua leadbeateri</i>	" 29-30-31
Coot, American, <i>Fulica americana</i>	" 96-98-99
Contentment	" 163
Crane, Queer doings of a	" 44
Creeper, Brown, <i>Certhia familiaris americana</i>	" 212-214-215
Dickcissel, <i>Spiza americana</i>	" 146-147-149
Duck, Bald Pate, <i>Anas americana</i>	" 48-50-51
Duck, Black, <i>Anas obscura</i>	" 86-87
Duck, Pintail, <i>Dafila acuta</i>	" 176-8-9
Duck, Old Squaw, <i>Glangula hycmalis</i>	" 223-5
Duck Farms, Eider	" 113
Egg, What is An	" 60
Eggs	" 155-195-235
Feathers or Flowers?	" 180
Finch, Purple, <i>Carpodacus purpureus</i>	" 54-55
Flycatcher, Arkansas, <i>Tyrannus verticalis</i>	" 230-231
Gnat-catcher, Blue-gray, <i>Poliophtila caerulea</i>	" 94-95
Goose, Canada, <i>Branta canadensis</i>	" 208-210-211
Goose That Takes a Hen Sailing	" 194
Grouse, Dusky, <i>Dendragapus obscurus</i>	" 150-151
Hawk, Sparrow, <i>Falco sparverius</i>	" 105-6-7
Heron, Great Blue, <i>Ardea herodias</i>	" 190-1-3
Ibis, White-Faced Glossy, <i>Plegadis guarauna</i>	" 226-7
I Can but Sing	" 186
June	" 201-202

Kindness, a Foster Brother's	pages 19-4
Kingbird, Arkansas, <i>Tyrannus verticalis</i>	" 230
March	" 82
Memory, Bird Songs of	" 124
Murre, Brunnich's, <i>Uria lomvia</i>	" 206-7
Music, Color in	" 161-2
Nature, Some Lovers of	" 229
Neighbor, Our	" 203
Nests, Birds'	" 204
Nest, Life in the	" 69
Nightingale, <i>Motacilla lusciniæ</i>	" 136-8-9
Nightingale, To a	" 141
Ovenbird, <i>Sciurus aurocapillus</i>	" 126-7
Owl, The Early	" 12
Owl, Saw-Whet, <i>Nyctala acadica</i>	" 61-2-3
Owl, Short-eared, <i>Asio accipitrinus</i>	" 25-6-7
Paradise, Birds of	" 140
Partridge, Mountain, <i>Oreortyx pictus</i>	" 34-35
Parrot, Double Yellow Headed, <i>Conurus mexicanus</i>	" 181-2-3
Partnership, a Forced	" 60
Partridge, Scaled, <i>Callipepla squamata</i>	" 114-115
Petrel, The Stormy, <i>Oceanites oceanicus</i>	" 88-90-91-92
Pheasant, Silver, <i>Phasianus nycthemerus</i>	" 110-111
Pigeons, The	" 4
Pigeon, Crowned, <i>Columbida goura</i>	" 6-7
Pigeon, Passenger, <i>Ectopistes migratorius</i>	" 21-22-23
Pleas for the Speechless	" 33
Plover, Snowy, <i>Aegialitis nivosa</i>	" 70-71
Prairie Hen, Lesser, <i>Tympanuchus pallidicinctus</i>	" 74-75
Queer Relations	" 233
Rhea, South American, <i>Rhea americana</i>	" 166-7-8
Sandpiper, Bartramian, <i>Bartramia longicauda</i>	" 134-5
Sparrow, English	" 175
Sparrow, Fox, <i>Passerella iliaca</i>	" 14-15
Spoonbill, Roseate, <i>Ajaja ajaja</i>	" 142-3-5
Spring Thoughts	" 185
Stilt, Black-necked, <i>Himantopus mexicanus</i>	" 174-5
Summary	pages 40-80-120-160-200-238
Superstitions, Irish Bird	pages 132
Swan, Black, <i>Cygnus</i>	" 65-66-67
Tenants, The New	pages 37-77-117-157-197-220
Thoughts	pages 146
Vireo, Red-Eyed, <i>Virco olivaceus</i>	" 8-10-11
Warbler, Bay-breasted, <i>Dendroica castanea</i>	" 170-171
Warbler, Magnolia, <i>Dendroica maculosa</i>	" 186-187
Woodpecker, Arctic Three-toed, <i>Picoides arcticus</i>	" 128-130-131
Woodpecker, Downy, <i>Dryobates pubescens</i>	" 216-218-219
Woodpecker, Ivory-billed, <i>Campephilus principalis</i>	" 101-102-103
Woodpecker, Red-bellied, <i>Melanerpes carolinus</i>	" 56-58-59
White, Gilbert, and "Selbourne"	" 41
Wooing Birds' Odd Ways	" 52

BIRDS



ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



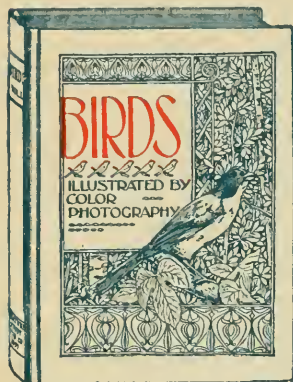
PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY, CHICAGO.

Copyrighted 1897.

Entered at Chicago Post Office as Second Class Matter.

Copyright 1898.

Entered at the Chicago Post Office as Second Class Matter.



BIRDS

.....Volume I and Volume II

January to June, and July to December, 1897.

One of the Finest Books ever
presented to the English-speak-
ing People ❁ ❁ ❁ ❁ ❁

A Wonderful Book.

A Work of Art!

Illustrations made by the New Process,

COLOR PHOTOGRAPHY

Adapted to Old and Young! The finest prize, holiday, or
Christmas present you can
find. Why not send one to your friend? Each volume a supplement to
the preceding, and yet complete in itself.

Bound in a beautiful and durable form.

SIXTY Full-Page Illustrations in Natural Colors in each volume.

VOLUME I OR II

Cloth, \$1.25; Half Morocco, \$1.75, and Full Morocco, \$2.25.

VOLUME I AND II UNDER ONE COVER

Cloth, \$2.25; Half Morocco, \$3.00, and Full Morocco, \$4.25.

For sale by all Newsdealers, Booksellers, and by subscription.

Sent, carriage paid, to any address in the United States or Canada
on receipt of price.

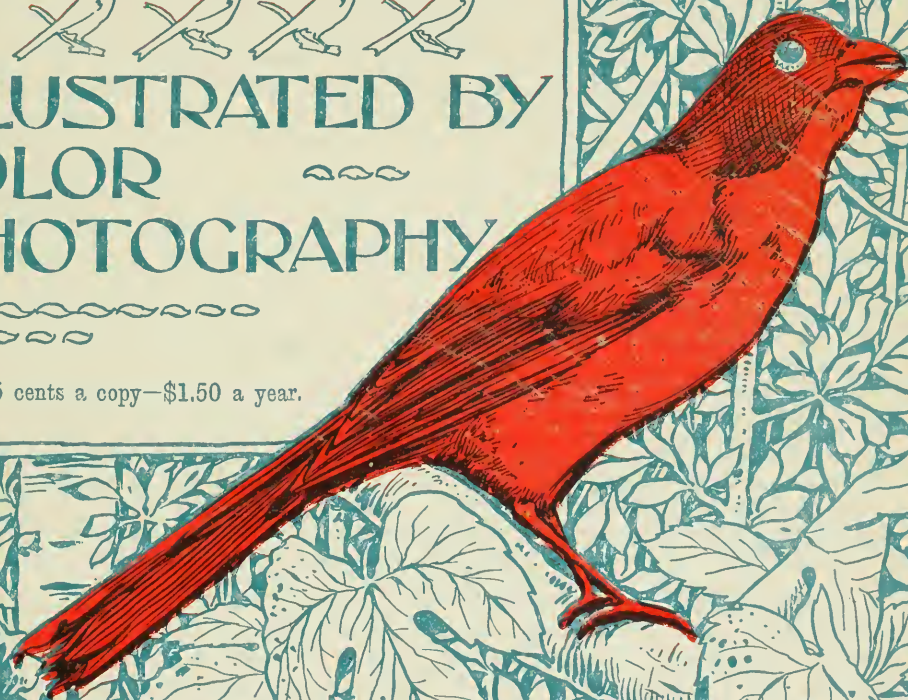
Address Mail Orders to **Nature Study Publishing Company**
CHICAGO, ILL.

BIRDS

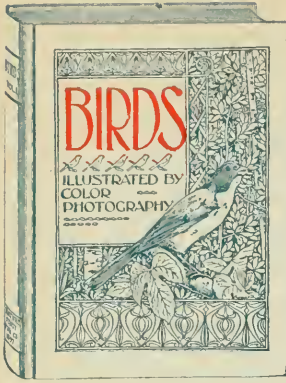


ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY: CHICAGO-



BIRDS

Vol. I and Vol. II

January to June, and July to December, 1897.

One of the finest books ever presented to
the English-speaking people ❁ ❁ ❁

A Wonderful Book

A Work of Art

Illustrations made by the New Process.

Color Photography

Interesting to Old and Young! The Finest Prize or Gift Book you can find. Each volume a supplement to the preceding, and yet complete in itself.

BOUND IN A BEAUTIFUL AND DURABLE FORM.

Volume I or II.

Cloth, \$1.25; Half Morocco, \$1.75, and Full Morocco, \$2.25.

Volumes I and II combined under one cover.

Cloth, \$2.25; Half Morocco, \$3.00, and Full Morocco, \$4.25.

For sale by all news dealers, booksellers, and by subscription.

Sent, carriage paid, to any address in the United States or Canada on receipt of price.

It is safe to say that if 10,000 copies of BIRDS, Volumes I and II combined, were the limit of the editions, they could be sold readily at hundreds of dollars each.

One of our subscribers writes: "I have one of the almost absolutely fresh copies of 'Audubon's Birds,' for which I have refused \$3,000.00, and I will say that the pictures of Birds given in your magazine are infinitely more true to life, and more pleasing in every way."

Address Mail orders to

Nature Study Publishing Company,

CHICAGO, ILL.

BIRDS

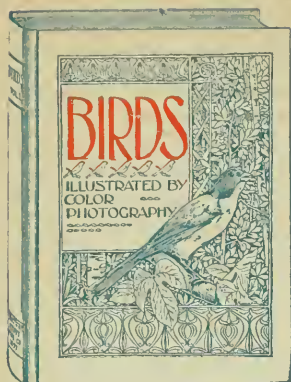


ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY: CHICAGO.



BIRDS

Vol. I and Vol. II

January to June, and July to December, 1897.

One of the finest books ever presented to
the English-speaking people ❀ ❀ ❀

A Wonderful Book

A Work of Art

Illustrations made by the New Process.

Color Photography

Interesting to Old and Young! The Finest Prize or Gift Book you can find. Each volume a supplement to the preceding, and yet complete in itself.

BOUND IN A BEAUTIFUL AND DURABLE FORM.

Volume I or II.

Cloth, \$1.25; Half Morocco, \$1.75, and Full Morocco, \$2.25.

Volumes I and II combined under one cover.

Cloth, \$2.25; Half Morocco, \$3.00, and Full Morocco, \$4.25.

For sale by all news dealers, booksellers, and by subscription.

Sent, carriage paid, to any address in the United States or Canada on receipt of price.

Have you ordered Volumes I and II yet? You should have them in your library.

READ THE FOLLOWING:

"I congratulate you on the success of BIRDS. I wish you would send me bound copies of the first two volumes. We have many inquiries here concerning the subject, and there is an increasing interest in bird study. I have been able and happy to recommend your publication to very many inquiring friends.

Yours very sincerely, CHARLES R. SKINNER,

Superintendent of Public Instruction, New York.

Address Mail orders to

Nature Study Publishing Company,

CHICAGO, ILL.

Do you Recommend

..BIRDS..

————— to your Friends?.

If not, have you done all the good to-day you can?



Read the following editorial from "Current Literature," January, 1898:

THE NEW AUDUBON.

It is one of the peculiar features of the development of the art of printing that the more mechanical the processes of reproduction are becoming the more artistic they seem. Human toil it now appears, is not a pre-requisite to finished beauty. The old engravers spent hours, days, and years of labor in the production of plates which do not begin to suggest qualities which are to-day obtained in a few moments of time by the aid of the photographer's camera. A case in point was the production in the early half of the century of a work of great variety and enormously costly manufacture—James Audubon's monumental *Birds of America*. Audubon himself gave up his life to the collection of the necessary data for this work. Its plates engraved on steel, were years in making. The best English engravers of the day were employed, and the resulting prints, made in colors from drawings by Audubon, represented the very highest perfection of the art of printing. The original subscription price of the work was in the hundreds of dollars, and there were therefore few who could count themselves among the possible possessors of so expensive a luxury. The tomes themselves were ponderous things, elephant folios, and the plates were life-sized reproductions of the various birds to be found throughout our continent. It seemed, indeed, as if the last word had been said upon that subject, and to this day Audubon's *Birds of America* has been at once a classic and a creation unrivaled in the literature of the natural sciences. As the century closes however, we find this epoch making work more than rivaled by purely mechanical processes, and an energetic publishing house in Chicago issuing a monthly magazine designed especially for the young, and sold at a very modest price, *in which the plates are as far superior to Audubon's book as that was to all those that preceded it*. *BIRDS* is the title of the Chicago magazine, and each month it presents eight full-page plates in color, *which are so accurate, so delicate in tone, so true to texture and so natural, that the engravings in Audubon seem like stilted charts, or coarse maps of bird-plumage in comparison*. The Audubon plates represent the perfection of hand work, as against new and purely mechanical processes; but like the history of all modern industries, the handwork must give place to the machine. And, on the whole, the machine proves to be the people's friend. It has wondrously reduced the cost of the necessities of life, and is making marked incursions into the territory of our luxuries. *For a few pennies we can to-day be the possessors of a work which is for all practical purposes superior to the great Audubon*. In explanation of this seemingly miraculous advance, it should be said that while the Audubon will always maintain an artistic pre-eminence from the fact that the plates were made from the drawings themselves of the great naturalist, no amount of human skill can directly attain the truth of color and form which can now be obtained through the new three-color process of photo-etching. Though but a doubtful success in other directions, this new color method has been peculiarly successful in the reproduction of still-life subjects, where objects can be left exposed for long periods to the camera without danger of changes of position. Collections of birds, or pottery, or stuffs are thus seen to be specially adaptable to it. The enterprising Chicago publishers have taken praiseworthy advantage of the facts, and the results are so surprisingly perfect that our counsel to every bird lover or naturalist is to make early acquaintance with their exquisite prints.—*From Current Literature, February 1898.*

ANIMALS

Will be as Popular as

"BIRDS."

WE are glad to receive daily letters and words of congratulation, not only upon the success of BIRDS, but also commendations of our plan to run a volume of Animals.

We propose to give to the admiring public the BIRDS, ANIMALS, FLOWERS and All Nature. To possess these numbers and volumes as they appear should be the aspiration of every one.

Never before has it been possible to secure such accurate reproductions. It is the marvel of the age. (See preceding page.) And the text is none the less interesting. Mr. Lynds Jones, of Museum of Oberlin College, has this to say: "The reading matter relative to each specimen is not by any means the least of the attractions. Such short life-histories are just the sort for those to whom the pictures would be the greatest service in learning the birds. The picture makes a tedious description of the species wholly unnecessary."

The text of ANIMALS will be delightful, and the illustrations, produced by our wonderful process, will combine to make a serial and volume surpassed by none and equaled only by BIRDS.

Nature Study Publishing Co.

CHICAGO, ILLINOIS.

What do **You** think of **Birds?**

This is what **SOME** people think.

You have certainly hit upon a method of reproducing natural colors with remarkable fidelity to nature.

DR. ELLIOTT COUES.

Your magazine has certainly had a phenomenal success, and it is entirely worthy of its cordial reception.

J. A. ALLEN,
Editor, *The Auk*.

This is one of the most beautiful and interesting publications yet attempted in this direction. It has other attractions in addition to its beauty, and it must win its way to popular favor.

CHAS. R. SKINNER,
New York State Superintendent of Schools.

Most of these pictures are astonishingly good. I like them so well that I shall put them up on the walls of my rustic retreat Slab Sides.

JOHN BURROUGHS.

When one considers the low price at which you sell BIRDS, the number and excellence of the plates are surprising, and I trust that your efforts to popularize the study of ornithology may meet with the success it so well deserves.

F. M. CHAPMAN,
Associate Editor, *The Auk*.

WILMINGTON, OHIO.

All in all, I think January BIRDS, just received, is an improvement on any preceding number. The illustrations are more uniformly good—*exquisite* is the epithet applicable to each one of them. A little more and your birds will live. Your birds have, indeed, to me the look of life, and seem ready to go. Nor is there any falling off in the letter-press.

A. P. RUSSELL.

Experts agree that the success of the delicate coloring in the Passenger Pigeon (January, 1898) is the greatest triumph the art of printing has attained.

What do **YOU** think of it?

ANIMALS

WILL FOLLOW

"BIRDS."

WE were not able to make this announcement in January, but we are ready now. We thank our many friends who have written and visited us, urging this. Arrangements have been perfected by which we shall be able to portray the animals of North America. It was hoped that we might get these out as a work separate from BIRDS, but the phenomenal success of the magazine has kept all our forces so fully engaged that a separate work is not practicable without disappointing too many of our subscribers, so we have decided to make the last half of the year 1898 a solid book of animals. All the varieties cannot be pictured in six months, but by combining the smaller ones in groups, we shall be able to show the representative animals of the country.

To those of our subscribers who prefer not to receive the numbers containing animals, we will, upon receipt of postal requesting it, discontinue for six months, and extend their subscription for BIRDS for six months.

From inquiries already made, we believe every subscriber, even those directly interested in Ornithology, will wish to receive ANIMALS regularly as it appears month by month.

Nature Study Publishing Co.

CHICAGO, ILLINOIS.

**WE SHALL CONTINUE THE OFFERS MADE IN THE
FOLLOWING LETTER FOR 30 DAYS.**

CHICAGO, ILL., November, 1897.

TO OUR SUBSCRIBERS AND FRIENDS:

We now have the pleasure of inviting your subscription for "BIRDS" for 1898. Almost a year has passed since the first number of this magazine was presented to the public. From the day of its first appearance not a month has passed without enrolling at least 1,500 annual subscriptions. By the first of December, 1897, 20,000 names may be found on our lists, and the purchases each month at the news stands are as many more.

We have only one apology to make, and that is the tardiness with which our magazine has appeared. This has been the result of **three definite causes**: First—the intricacies of a new process, which only of late has been developed to practical use; second—the unprecedented demand for back numbers. During the year we have printed four large editions of both January and February numbers, three large editions of both March and April, and two editions of the supplementary pictures for May and June. Third—New postal rulings require us to mail the supplementary pictures under separate cover and stamp. This compelled us to make new arrangement of our subscription list, materially retarded our work, caused mistakes, and necessitates our adding 50c. to price of sheets to cover additional expense in mailing. We now have overcome all these difficulties, and from January, 1898, each subscriber will receive BIRDS regularly early in the month.

The success of BIRDS is due to its magnificent color illustrations produced by **Color Photography**, and its unique treatment of the text. Popular, and yet scientific, it is interesting to old and young alike.

For 1898 the same general features will be maintained. Four pages of text will be added, and eight full pages of illustrations will take the place of ten. Whenever possible, groups will be presented, showing male, female, and young, so that the number of birds portrayed will be increased.

With this fair record and brilliant prospects, it is with confidence of an early response that we ask your subscription for 1898.

The prices will remain as follows:

BIRDS in twelve monthly numbers \$1.50 a Year
Supplementary pictures, (same as in magazine proper) . . . \$1.00 a Year

SPECIAL TO TEACHERS:

BIRDS and supplementary pictures to one address . . . \$2.00 a Year

Would You Like your Subscription Free for 1898?

Any one who will send us before January 1, 1898, four cash annual subscriptions for BIRDS at the regular price for 1897 or 1898, may have

**BIRDS FOR 1897 OR 1898, or for three subscriptions,
BIRDS VOL. I OR II, BEAUTIFULLY BOUND IN CLOTH.**

There is not one of our subscribers who cannot show BIRDS to four of his or her friends, and receive their subscriptions. One subscription for two years counts as two for one year.

Do you not want to send BIRDS to some of your friends for a Christmas or birthday present? Nothing would please them more.

Please fill out the accompanying order, writing names and address with care:

**NATURE STUDY PUBLISHING CO.,
Chicago, Ill.**

"BIRDS"



for 1898

differs from the magazine of the previous year in having eight full-page illustrations and four more pages of reading matter each month.

With increased facilities, we hope to be able to keep up with the calendar, and deliver each number early in the month. This has been impossible in the past for reasons which are very gratifying to us, but which were annoying at the time. One of these reasons was the great demand for back numbers.

It gives us pleasure to state that we now have a large stock of all numbers, beginning with that of January, 1897. We supply these at the same rates as the current numbers. We are receiving and filling subscriptions every day that date back to the first number of Volume I.

We send carriage free a beautiful premium picture to every new annual subscriber. It is the **Golden Pheasant**, plate 13 x 18 on a card 18 x 24. It is a splendid ornament for the dining room or hall.

The price of "BIRDS" is \$1.50 a year in advance. The illustrations on loose plates may be ordered at \$1.00 for the year. Both magazine and loose plates to one address, \$2.00 a year.

In ordering "BIRDS" for 1897, it is well to get them in the fine bindings mentioned on another page.

Nature Study Publishing Company,

CHICAGO, ILL.

BIRDS

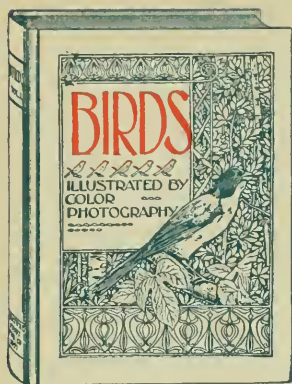


ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY CHICAGO.



BIRDS

Vol. I and Vol. II

January to June, and July to December, 1897.

One of the finest books ever presented to
the English-speaking people ❀ ❀ ❀

A Wonderful Book

A Work of Art

Illustrations made by the New Process,

Color Photography

Interesting to Old and Young! The Finest Prize or Gift Book you can find. Each volume a supplement to the preceding, and yet complete in itself.

BOUND IN A BEAUTIFUL AND DURABLE FORM.

Volume I or II.

Cloth, \$1.25; Half Morocco, \$1.75, and Full Morocco, \$2.25.

Volumes I and II combined under one cover.

Cloth, \$2.25; Half Morocco, \$3.00, and Full Morocco, \$4.25.

For sale by all news dealers, booksellers, and by subscription.

Sent, carriage paid, to any address in the United States or Canada on receipt of price.

Have you ordered Volumes I and II yet? You should have them in your library.

READ THE FOLLOWING:

"I congratulate you on the success of BIRDS. I wish you would send me bound copies of the first two volumes. We have many inquiries here concerning the subject, and there is an increasing interest in bird study. I have been able and happy to recommend your publication to very many inquiring friends.

Yours very sincerely, CHARLES R. SKINNER,

Superintendent of Public Instruction, New York.

Address Mail orders to

Nature Study Publishing Company,

CHICAGO, ILL.

BIRDS



ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY CHICAGO

A Great Offer

Books by the Author of "Quo Vadis."

To the Subscribers and Readers of "BIRDS."

We are sure that you are greatly interested in our magazine. The production of this work of art is so costly, that we must have a circulation of 100,000 copies.

WE ASK YOU TO HELP US, and we make this offer good until June 1st, 1898.

For one new annual subscription we will send you (absolutely free) a cloth-bound book, entitled

"Let Us Follow Him,"

By the Author of "QUO VADIS."

It was this book that inspired the author with the conception of "Quo Vadis," and in many respects it is the greater work of the two.

For two new subscriptions we will send you by mail a copy of the handsomely illustrated edition of the larger work by the same author,

"With Fire and Sword"

This book is preferred by many to "Quo Vadis." It is certainly one of the best premiums ever offered for so small a return.

Can you not give a few minutes to invite your neighbors to subscribe for our Matchless Magazine, "BIRDS," and secure free one or both of these books?

If you desire "Quo Vadis," cloth binding, illustrated edition, instead of "With Fire and Sword," specify to this effect when sending orders.

Orders must be addressed to the

Subscription Department,

Nature Study Publishing Co.,

521 Wabash Ave., CHICAGO,

and must be accompanied with a remittance of \$1.50 for each subscription.

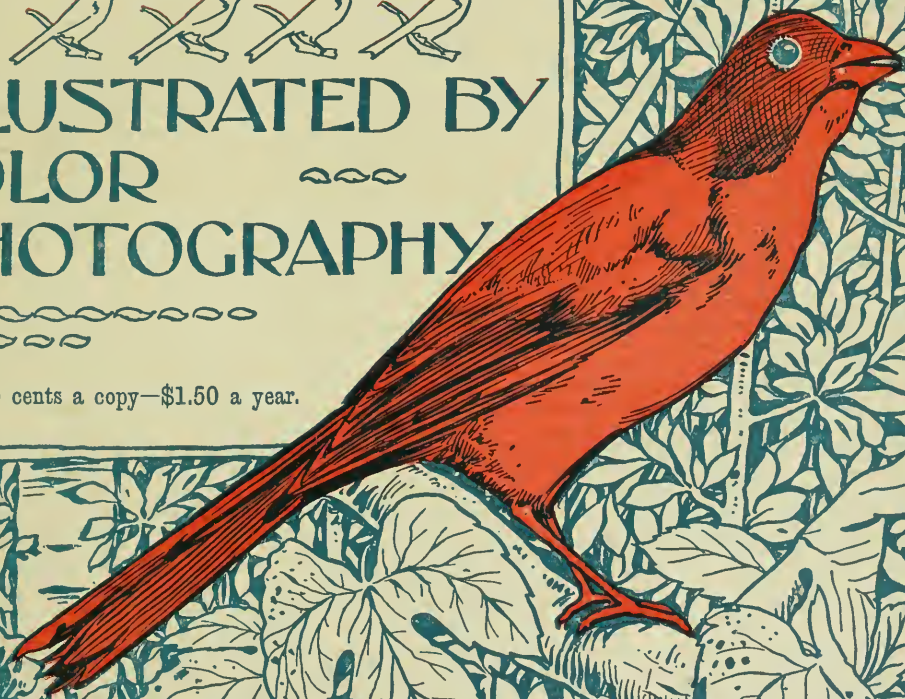
Be sure and ask for the premium.

BIRDS



ILLUSTRATED BY
COLOR
PHOTOGRAPHY

Price 15 cents a copy—\$1.50 a year.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY: CHICAGO

Copyright 1898.

Entered at the Chicago Post Office as Second Class Matter.

BIRDS



AND ALL NATURE

WE here present to our subscribers and friends the cover design to be used in our publication beginning with July. Each number will present at least two birds, four animals, and the remaining plates will depict such natural subjects as insects, butterflies, flowers, geological specimens, etc. In fact, every thing in nature which can be brought before the camera will in its due course be portrayed.

"BIRDS" is without doubt one of the most popular magazines ever presented to the American public. It is read and admired by over one hundred thousand. Our mailing list includes nearly every country in the world, and yet the magazine is only one and one half years old.

"BIRDS AND ALL NATURE" promises to be even more popular, if possible, than "BIRDS." We receive daily congratulations upon the success of our enterprise, and people are delighted to learn that we shall include in succeeding numbers all interesting branches of natural history.



PUBLISHED BY
NATURE STUDY PUBLISHING COMPANY
CHICAGO & NEW YORK



GLADSTONE.



A Grand Picture of the Grand Old Man.



As the picture is produced in colors by the same process as "BIRDS," we intend to give our subscribers the benefit of a special offer.

The size of the picture, including margin, is 16 x 25. It is published at the low price of fifty cents; and our offer to subscribers of "BIRDS" is—First: We will send to any subscriber a copy of this magnificent portrait, carefully packed in mailing tube, for twenty-five cents. Second: If you have a friend whom you can interest, and thereby secure their subscription for "BIRDS," we will send you *free* a copy of the picture, providing you send us their order prepaid, and ten cents for mailing and packing. Third: If you have already paid your subscription for this year, and desire to have it extended to the end of another year, by remitting the subscription price, we will send as per same terms as number two.

It is not too much to say that, in the realm of color printing, there has never been anything equal to our process, and never has there been a picture published producing at once so pleasing and perfect an effect as the portrait of the great statesman, W. E. Gladstone. It has all the best effects of a high class Oil Painting, and is pronounced by those who have seen Mr. Gladstone to be the best portrait ever published.

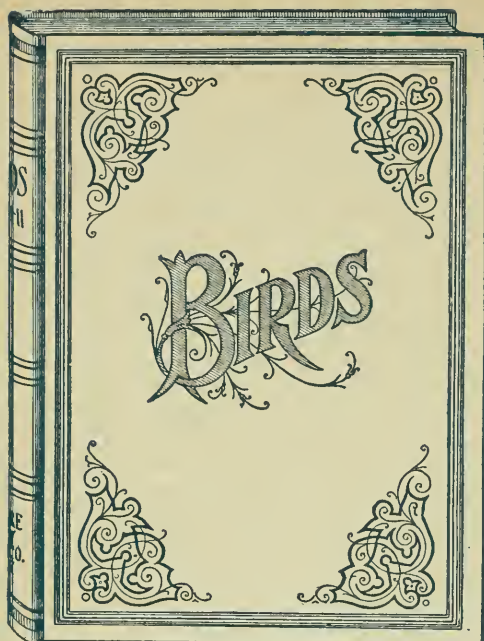
Those who own a copy will, in time, value the same at far above its original cost.

Nature Study Publishing Co.,

521 WABASH AVE.,

CHICAGO, ILL.





Birds Vol. III.

January to June, 1898.

Bound in Cloth,

Half Morocco,

Full Morocco.

Stamped in Gold and Aluminum,
with Gilt Top.

BIRDS, VOL. III, contains some of the richest specimens of color printing the world has ever seen. The Passenger Pigeon in the January number has excited the admiration of our 100,000 readers. Unsolicited recommendations come from our subscribers in every state in the Union, Canada, Europe and Asia, and the islands of the sea.

Among the more interesting birds depicted are the following: Bob White, Prairie Hen, Bald Pate Duck, Wilson's Petrel, Scaled Partridge, Oven Bird, Nightingale, Dickcissel, Ostrich, Bay Breasted Warbler, Magnolia Warbler, and thirty-four others, common for the most part to our country. There are three plates of eggs, showing between fifty and sixty different subjects. These egg plates are intensely interesting and exceedingly valuable.

If you have Vols. I and II, you should not fail to procure this the third volume of a series original in conception and brilliant in execution. Similar plates cannot be found anywhere, nor at any price; and the text is popular and yet scientific, interesting to all ages alike.

Price Vol. III	\$1.25	Cloth,	\$1.75	Half Morocco,	and	\$2.25	Full Morocco.
" " I or II. . . .	\$1.25	"	\$1.75	"	"	\$2.25	"
" " I and II com- bined . .	\$2.25	"	\$3.00	"	"	\$4.25	"

Address mail orders to

Nature Study Publishing Company,

521 Wabash Ave., CHICAGO, ILL.



First Class Men Wanted!

Those Accustomed to doing business with Officials.

References must be First-Class.

No Sale Less than Twenty-five Dollars.

The Birds of North America

*Charts for Schools, Colleges,
and Kindergartens*

LANGUAGE LESSONS
NATURE LESSONS
DRAWING LESSONS
COLOR LESSONS
LESSONS IN MORALS and MANNERS
ORNITHOLOGY

The best selling goods ever placed before the authorities of our public institutions. First-class men can do excellent business with these charts.

Nature Study Publishing Co.,

CHART DEPARTMENT,

521 Wabash Ave., CHICAGO, ILL.



Short Extracts from Friendly Letters:

You cannot afford to be without BIRDS.	The publishers have devised a new thing and entered a field entirely their own.	Lovers of the beautiful should examine the new and beautiful magazine BIRDS	A little more and your Birds will live.	Nor is there any falling off in the letter press.
Your BIRDS seem ready to go.	BIRDS is an invaluable aid to teachers.	The reading matter relating to each species is not by any means the least of the attractions.	In one series of the texts, birds are made to speak for themselves.	Sometimes the Birds sign their own names. There is something very taking about this, especially with our young folks.
The publication is as interesting to adults as it is to the young.	The portraits are worthy of an elaborate frame and a place on the wall.	Such pictures of Birds it has never before been our privilege to see—such perfection in form, color, and setting.	Of all the periodicals that have ever come to our notice BIRDS is the most remarkable.	For a few pennies we can to-day be in possession of a work which is for all practical purposes superior to the great Audubon.
We can attest the accuracy of the portraits of such old friends as the Blue Jay, Scarlet Tanager, Oriole, Robin, Wren, etc., and because of their absolute perfection we are willing to accept the presentments of unfamiliar species.	And each month presents eight full page plates in colors which are so accurate, so delicate in tone, so true to texture and so natural, that the engravings in Audubon seem like stilted charts or coarse maps of Bird plumage in comparison.	I have the whole of '97 of BIRDS with exception of March, so kindly send me same as I would not take \$50.00, if I had to be without it. BIRDS is just what I have been looking for for years. It is the next thing to nature itself and that is all a person can want.	If you are a lover of the beautiful as manifested in nature, children, music, and all art, you will be charmed with BIRDS.	The person who subscribes for this work will have in his hands a natural history of birds with illustrations equal to Audubon's great work, and, if possible, even more natural.
It is a wonderful work and should be in every home in this country.	BIRDS is as beautiful, as unique, and as useful a publication as can be imagined.	I am so thrilled by the exquisite coloring of Bob-White and Passenger Pigeon in the January number of BIRDS that I must write to praise you.	By the way, I think that Pigeon in the January number the most remarkable picture of a bird I ever saw in a book.	I have a copy of Audubon, which in its way is a useful book, but it does not meet the case as does BIRDS.
The articles are concise and charmingly written, giving all interesting points about their habits.	The Meadow-Lark, Robin, Blue-Jay, Kingfisher, Wren, and all of the other familiar birds are depicted.	To read a condensed sketch of their life and habits is like being among them in reality, so real does the charming picture make them.	Each edition of BIRDS seems to surpass the last. The coloring is soft and beautiful, and at the same time true to nature.	Those interested should write to the Nature Study Publishing Co., No. 521 Wabash Ave., Chicago, Ill.
Beginning with the July number several plates of interesting animals will be included and birds will not be entirely discarded. One or two will appear each month.	The price of BIRDS AND ALL NATURE is \$1.50 a year. Less than one year 15 cents a copy.	Supplementary pictures, \$1 a year. Magazines and supplements to one address, \$2. Supplements per single set, 10 cents.	BIRDS, Vols. 1-11 combined, \$2.25 cloth; \$3.00 half morocco; \$4.25 morocco. BIRDS, Vols. 1 and 11, separate covers, \$2.50 cloth; \$3.50 half morocco; \$4.50 morocco.	Agents wanted to sell school charts—no sales less than \$25.00. Best references required—liberal commission. Address, Chart Department.

Nature Study Publishing Co., 521 Wabash Ave., Chicago, Ill.



First Class Men Wanted!

Those Accustomed to doing business with Officials.

References must be First-Class.

No Sale Less than Twenty-five Dollars.

The Birds of North America

*Charts for Schools, Colleges,
and Kindergartens*

LANGUAGE LESSONS
NATURE LESSONS
DRAWING LESSONS
COLOR LESSONS
LESSONS IN MORALS and MANNERS
ORNITHOLOGY

The best selling goods ever placed before the authorities of our public institutions. First-class men can do excellent business with these charts.

Nature Study Publishing Co.,

CHART DEPARTMENT,

521 Wabash Ave., CHICAGO, ILL.



A Great Offer

Books by the Author of "Quo Vadis."

To the Subscribers and Readers of "BIRDS."

We are sure that you are greatly interested in our magazine. The production of this work of art is so costly, that we must have a circulation of 100,000 copies.

WE ASK YOU TO HELP US, and we make this offer good until June 1st, 1898.

For one new annual subscription we will send you (absolutely free) a cloth-bound book, entitled

"Let Us Follow Him,"

By the Author of "QUO VADIS."

It was this book that inspired the author with the conception of "Quo Vadis," and in many respects it is the greater work of the two.

For two new subscriptions we will send you by mail a copy of the handsomely illustrated edition of the larger work by the same author,

"With Fire and Sword"

This book is preferred by many to "Quo Vadis." It is certainly one of the best premiums ever offered for so small a return.

Can you not give a few minutes to invite your neighbors to subscribe for our Matchless Magazine, "BIRDS," and secure free one or both of these books?

If you desire "Quo Vadis," cloth binding, illustrated edition, instead of "With Fire and Sword," specify to this effect when sending orders.

Orders must be addressed to the

Subscription Department,

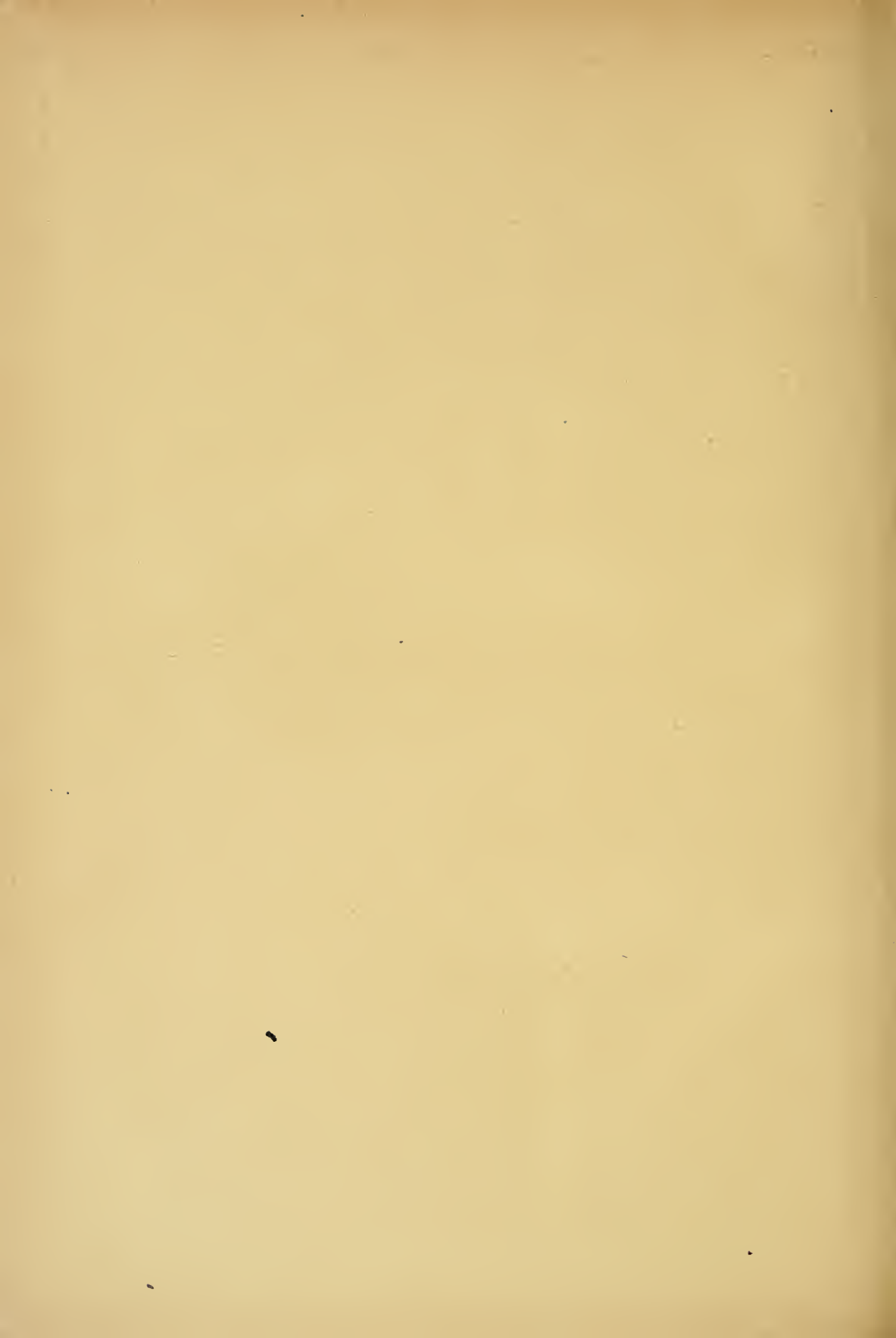
Nature Study Publishing Co.,

521 Wabash Ave., CHICAGO,

a must be accompanied with a remittance of \$1.50 for each subscription.

Be sure and ask for the premium.





Q1681
B57
1897
v.3

Birds and nature.

Date
Loaned

Borrower'

QL681

.B57

1897

v.3

Birds and nature.

AMNH LIBRARY



100109489